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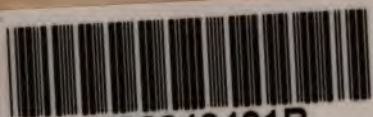
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THOMAS DAVIS *of LONGLEAT.*

GENERAL VIEW
OF THE
AGRICULTURE
OF
WILTSHIRE.

DRAWN UP AND PUBLISHED BY ORDER OF
THE BOARD OF AGRICULTURE
AND INTERNAL IMPROVEMENT.

BY THOMAS DAVIS.

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1. What is the purpose of the document?
 2. What are the main findings of the study?
 3. What are the implications of the findings?
 4. What are the limitations of the study?
 5. What are the conclusions of the study?

[illegible]

PREFACE.

IN offering this Work to the Public, through the medium of the Board of Agriculture, I wish it to be clearly understood, that although I consider myself responsible for the facts and opinions herein stated, as a faithful Report of the Agriculture of the County of Wilts, yet I claim no share of that merit which was allowed to the original work in 1794. My father at that period made a complete agricultural tour of the county; the landholders were willing to show him their practice, and to tell him their opinions, and he was fully able to judge of the correctness of *both*. After repeated solicitations from the President of the Board, my father undertook in the summer of 1807, to republish his Survey of Wilts; and received the usual instructions on such occasions. He died in November 1807, without having made any progress in it. I have since that time perused and digested the original papers, and have compared the Report of 1794 with the practices of the county at the present day. In the arrangement for the press, I have endeavoured to pursue the plan laid down by the orders of the Board, and to correct the original information on points

WILTS.] b affected

affected by time and circumstances; but I have preserved, as far as possible, the opinions of my father, because I have *proved them*. When the County Reports of 1794 were sent to the respective authors, with marginal observations by men of professed knowledge in agriculture, a few were received here, questioning in rather *strong* terms the opinions expressed in the Survey of Wilts. I have attended to those observations with peculiar care; and if those gentlemen should think me obstinate, in republishing *my father's errors* (as they will probably be termed), I must request they will take the trouble at least to see the county, before they condemn the practices, or dispute the abilities, of the farmers resident in it. I am ready to suppose that men are astonished at a system of agriculture to which they are not accustomed; but I contend that every surveyor should have the liberality to believe there are some good farmers in all counties, and that it is a part of his profession to note the experience of customs heretofore unknown to him. Few of us have the opportunity and general practice, and the writers on the subject are mostly men of theory. It is as much the duty of a Surveyor to distinguish between ancient customs of husbandry and modern practices, by a due attention to the result of the system, as to make a distinction in the soils he views. In fact, it is the aptitude of peculiar soils to peculiar systems of cropping, which makes land more
or

PREFACE.

or less valuable for the purposes of agriculture, in proportion as the farmer can raise that produce which is marketable on or near the spot where it grows. I cannot suppose these commentators on the Wilts Survey, to be men of less observation than my contemporaries of the West; this would be an illiberal opinion; but the justice I do them in granting this much, induces me to assert they had never seen, or at least not noticed, the result of the system they condemn, and the soil in which it is practised. A very intelligent Scotch farmer, lately become an occupier of lands in Wiltshire, on reading some of the remarks to which I allude, and being well acquainted with the northern counties, said that "*they were illiberal assertions respecting a country unknown to the Writer, but that the sentiments were evidently expressive of good husbandry on the soil where the Writer resided.*" It has been my endeavour to uphold my father's Report of this County, because he had lived long and most respectably in it, as a steward for extensive property, as a planter, a surveyor, and a practical farmer; and as I wish the Survey of Wilts to be considered rather as a posthumous work of the Original Compiler, than as an essay of my own, I have prefixed to it an engraving of my father's portrait, with a copy of the Tablet which the Bath and West of England Society voted to his memory.

It has been suggested, that the Work should

contain some account of the experience of a man of great practice on *general subjects*. But I have considered the title of the book should be strictly adhered to, and I hope the Board of Agriculture and the public will excuse me for making this production simply what it professes to be, "*A Report of the State of Agriculture in the County of Wilts.*"

INTRODUCTION.

IN an Agricultural Survey of a County, the great objects of enquiry seem to be, *1st*, Whether the land be applied to its proper use? And, *2dly*, Whether that application be properly conducted? And as a clue to this enquiry, the following observations, though trite, are worthy of consideration.

The agricultural pursuits of the inhabitants of every county are directed, in the first place, to supply their own wants; and next, to enable themselves to purchase the necessaries they cannot raise, by a sale of those of which they have a surplus.

The natural soil and climate of a country, and its peculiar aptitude to particular productions, may give the first turn to a choice in agriculture; but there must be a constant and regular demand for the surplus of those productions, to give that spirit and energy which is necessary to bring the art of raising them to perfection. And as the difference in the price of the necessaries of life arises chiefly from the expense of carrying them from the place of their production to the place of their consumption, those countries will have the advantage in the sale of such commodities, which are nearest to the place of their consumption. In five words, *good markets make good farmers.*

How far the landholders of the County of Wilts have availed themselves of the advantages that nature and situation have given them, and in what instances there is still room for improvement, is the great object of the

present Survey. And to ascertain this, it will be necessary to enumerate the several articles to which the agriculture of this county is at this time principally directed.

Wiltshire, as being partly a corn and partly a grass county, is capable of producing most of the principal articles of human sustenance; and being in general a well cultivated district, its produce is considerably more than its consumption. Its situation is well calculated to dispose of its surplus, or perhaps in other words, the energy infused into it by the advantage of that situation, has enabled it to have a surplus to dispose of, and to bear the rank it holds in the agricultural scale of the kingdom.

Principal Produce of Wiltshire.

The principal productions of the county, serving immediately for human food, are, corn, chiefly wheat and barley; cheese and butter; fat calves; fat cattle and sheep; fat pigs.

The manufacturing towns within the county, and in the eastern part of Somersetshire, and the cities of Bath and Bristol, furnish a constant regular demand for these productions, and London takes no inconsiderable part of them.

To these articles serving immediately for human sustenance, may be added one that serves eventually for that purpose, viz. "Sheep for store;" of which great numbers bred in this county are sold off yearly, to be fattened elsewhere, chiefly in the eastern counties for the London market.

And to these productions of human food may be added a very material article of human necessity, viz. "Wool," of which the vast quantity that is raised here, finds a never-

never-failing demand in its own manufactories and those of the adjoining counties.

These enumerated articles being the principal objects to which the attention of the landholders is at present directed, the great purpose of this enquiry into the state of agriculture in the county of Wilts is, first, To ascertain whether the soils and situation of the county be peculiarly adapted to the productions of those articles? and next, Whether the methods employed in that production are the most proper for their respective purposes? and not only to point out such errors as may appear to be either in the application or management of the land or stock of the county, but also to remark wherein the excellence of the present system consists, and in what instances it is worthy of imitation in other counties.

The Author begs leave to state, that his remarks are the result not only of an actual survey of the county by his late Father, the compiler of the Original Work, but of an attention to the practice and opinions of the most intelligent farmers in it, during a long and extensive intercourse with them. And he hopes that the Report will be found candid and unbiassed, and to contain a full and just account of the present state of the Agriculture of Wiltshire.

“The peculiar variety in the two Districts has induced the Compiler in some measure to deviate from the plan proposed by the Board of Agriculture, but as his motive in so doing has been the more fully to elucidate his subject,” he trusts that he shall be excused by that Honourable Institution.

GENERAL DESCRIPTION OF THE COUNTY,

AND

THE DIVISIONS THEREOF.

WILTSHIRE is an inland county, bounded on the north and north-west by Gloucestershire, on the west by Somersetshire, on the south-west by Dorsetshire, on the south and east by Hampshire, and on the north-east by the county of Berks. The county in its shape, somewhat resembles an ellipse whose major axis bears north and south.

There is a very striking difference in the appearance of the south-east and north-west sides of this county; the former presenting a broken mass of chalk-hills, which enter the county from Berkshire, Hampshire, and Dorsetshire, and terminate in bold breaks running from the north-east to the south-west side of the county; and the latter being chiefly composed of a rich tract of vale land, stretching north-east and south-west through the county, under the foot of the chalk-hills, but rising gradually north-west, till it joins the high lands of Gloucestershire.

It is about 54 miles in length, and 34 in greatest breadth; and contains about 1372 square miles, or 878,000 acres.

DIVISIONS.

DIVISIONS.

IN speaking of this county, it is usual to separate it into two districts, viz. South Wiltshire, and North Wiltshire; and the division is generally made by supposing an east and west line to pass through the county at or near Devizes, thereby leaving Marlborough Downs in North Wiltshire; but in treating of the county "agriculturally," it will make a more natural division, to draw an irregular line "round the foot of the chalk-hills," from their entrance into the north-east part of the county from Berkshire, to their south-west termination at Maiden Bradley; thereby comprehending the whole of the Wiltshire Downs, with their intersecting valleys and surrounding verges, under the name of South Wiltshire, or more properly, South-East Wiltshire, and calling the residue of the county, North Wiltshire, or more properly, North-West Wiltshire. The natural appearance and the agricultural application of the two parts of the county will warrant this division: the first containing the chalk-hills, usually called the Wiltshire Downs, whose general appropriation is to corn husbandry and sheep-walks; and the other, comprising a tract of rich grazing land, on the banks of the Lower Avon and the Thames, famous for the feeding of cattle, and for one of the best kinds of cheese of which this kingdom can boast. As the difference in the soil, situation, and productions of the two divisions is so very great, it will be necessary (after premising some few general remarks upon the property of the county at large) to treat of them as two distinct and separate Districts.

The greater part of this county was formerly, and at no very remote period, possessed by large proprietors.

tors. Almost every manor had its resident lord, who held part of the lands in demesne, and granted out the rest by copy or lease to under-tenants, usually for the term of three lives renewable. A state of commonage, and particularly of open common-fields, was peculiarly favourable to this tenure.

Enclosures naturally tend to its extinction. The north-west part of Wiltshire, being much better adapted to enclosures and to subdivisions of property than the South, was first enclosed; the south-east, or down district, for reasons which will hereafter be adduced, has undergone few enclosures, and fewer subdivisions; and whilst a great deal of the property of the former district has been divided and subdivided, and gone into the hands of the many, the property in the latter district has been bought up by the great landholders, and is now in fewer hands than it was in the seventeenth century.

There are undoubtedly many exceptions to this general remark, and there is in both districts a great deal of property in mortmain, belonging to Churches, Colleges, Schools, and other pious and public foundations, which necessarily remains in its original state; but, generally speaking, it may be said that a considerable part of the North-west District is possessed by small proprietors, and that by far the greater part of the South-east District is the property of wealthy landholders.

Reasons will hereafter be adduced, to shew that this difference is the natural effect of a number of causes, immediately resulting from the difference in the soil and situation of the two Districts, and which effect must have been, and undoubtedly is, uniformly produced in all parts of the kingdom where the same causes exist.

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To accompany the AGRICULTURAL ACCOUNT of Wiltshire.
By W. THOMAS BATES.

EXPLANATION.

Those Parts of the County which consist chiefly of Arable Land are coloured yellow.
The Water Meadows are distinguished by a deep green line following the Rivers.
The Woods of which the greater part are Stone Walls to the east are distinguished by a Black or Green line.

AGRICULTURAL SURVEY
OF
WILTSHIRE.

SOUTH-EAST DISTRICT.

CHAP. I.

GEOGRAPHICAL STATE AND CIRCUMSTANCES.

SECT. I.—SITUATION AND EXTENT.

“**SOUTH WILTSHIRE,**” or more properly, “**South-East Wiltshire,**” comprehends that part of the county called the Wiltshire Downs, and contains about 780 square miles, or nearly 500,000 acres.

The distant appearance of the whole is that of a large elevated plain; but upon a nearer approach, we find the surface broken into numberless inequalities, and intersected by several deep vallies formed by brooks or rivulets, which chiefly rise within the district, and on the banks of which, the villages, with very few exceptions, are situated.

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SECT.

SECT. II.—CLIMATE.

THE cold sharp air of the Wiltshire Downs is so well known, as to be almost proverbial. The height of the hills, and their exposure to the south-west wind from the Bristol and British Channels, the want of enclosures in the vallies, and the draught of air that necessarily follows the rivers, undoubtedly contribute to make this district healthy both for man and beast ; but the length of the winter consequent to such a situation, is certainly unfavourable to many of the purposes of Agriculture.

SECT. III.—SOIL.

THE soil of this district, though various, is in a certain degree uniform : the hills are chalk, with its usual accompaniment of flint ; and in general the land on the sides of the hills, from which the flints have been washed, is a chalky loam, or rather a dissolved chalk ; the flatter parts are a flinty loam, and the centre of the vallies through which the rivalets run, is a bed of broken flints covered with black earth washed from the hills above. In some of the vallies there are veins of peat formed by the black earth without any mixture of flints. Hence we may observe, that the white land prevails most near the sources of the rivalets, where the hills are steepest ; and the flinty loams near the junction of the rivulets where the country is flattest. The sides of the hills, which have been most washed, are the thinnest and weakest soil ; and the level tops, which

which have been very little, if at all, washed, are frequently the deepest and strongest land.

But there are some very singular sand veins running through a large portion of this district, which deserve particular notice. One very narrow, but very fertile vein enters the county at Mere, on the borders of Dorsetshire, and takes a north and north-east direction round the outside edge of the Downs, keeping nearly close to their foot, by way of Maiden Bradley, Warminster, Westbury, and Lavington, towards Devizes, where it meets and unites with a much wider and still more fertile vein, coming down the Pewsey Vale from Burbage.

Another vein also enters the county from Dorsetshire, being the continuation of the sand-hill on which Shaftesbury stands, and passes through Donhead, Ansty, Shallowcliffe, Fovant, &c. under the foot of the down, till it is stopped by the high ground in Burcomb-field. This vein is also met at or near Fovant by another branch, or rather a ridge of sand-hills, coming from West Knoyle by Stop Beacon and Ridge.

There are some instances of strong clays and clayey loams on the skirts of this district; but as they make no part of the corn and sheep division of the county, and the quantity of this land is small, and its management is the same as that practised in similar soils in North Wiltshire, it will be needless to say more of it here.

These soils, with all their consequent mixtures and variations, may be said to constitute the far greater part of this district.

SECT. IV.—WATER.

Most of the springs which rise in Salisbury Plain run southward or eastward, and joining at or near Salisbury, towards the south-east corner of the county, form the river called the "Wiltshire, or Upper Avon."

The streams which issue from the Marlborough Downs, make, by their confluence at Marlborough, the "river Kennett," which after receiving the waters of the Bedwin Vale, leaves the county at Hungerford.

There is scarcely a river or brook in this district, that is not applied in some way or other to the purposes of irrigation.

CHAP. II.

STATE OF PROPERTY.

IN our observations on the general state of the property of the county, we have remarked that this district is at present chiefly possessed by wealthy landholders, and that the number of proprietors was at one time greater than it is at present. But it is equally clear, not only from history, but from an examination into the nature of its subdivisions, that it was originally in much fewer hands than it now is.

The regular division of the manors of the district, shews that many of them were formerly the property of one Lord, and that their disposition was a matter of choice, and not of necessity or accident. The vallies of the district are (almost without an exception) intersected longitudinally by rivulets. The sides of these rivulets being the most eligible situation for buildings, were of course crowded with houses. These vallies, with their accompanying rivulets, are frequently from three to five miles apart, hills intervening between them. The shape of the manors, therefore, necessarily became a narrow oblong : each manor required water and meadow ground, and also (as pit-coal was very little, if at all, in use at that time), wood for fuel. The meadow ground very properly was situated near the river, and the wood on the tops or sides of the hills. The vestiges of wood which are visible in some

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parts,

parts, and the woods which remain in others, evidently shew that the summits of the hills were for the most part originally covered with wood.

The manors of this district were therefore naturally divided into long narrow strips from river to wood, with a right to the use of both ; and as such is the disposition of the greatest part of the district, it appears to have been an accommodation given by the original granters, or superior Lords, to the grantees or inferior holders ; as a proof of which, there are numerous instances in the district, where a want of meadow or of wood was supplied by a grant of those necessary articles from other property, at the distance of several miles from the manor to which they were annexed.

The influx of trade and commerce, and consequently of money, has tended to the division of property, and to the increase of the number of small freeholders in many parts of the kingdom. Lords of manors who were inclined to dispose of their property, found that they could sell it more advantageously in small lots than in entire manors ; but this has been chiefly the case in the neighbourhood of great towns, where land could be easily applied to pasture.

In this district it has been otherwise ; the small number of great towns in the south-east part of Wilts, the difficulty of raising quick fences in high exposed situations ; the little tendency of the land to pasture ; and above all, the *indivisibility* of the manors, occasioned by their awkward shape, and the detached situation of the several pieces composing each estate ; the difficulty of getting rid of the common rights over such lands, and the consequent impossibility of making any considerable improvement in their value, seem to be the principal

principal causes which have kept most of the manors entire, and in the hands of large proprietors.

The residence of many of the principal land-owners in the district, on account of its reputed good air and eligible situation for sporting, has also contributed in a great degree to prevent any considerable dismemberment of property.

CHAP. III.

BUILDINGS.

SECT. I.—HOUSES OF PROPRIETORS.

IN the foregoing pages it has been intimated, that the property in South Wiltshire is in few hands. The owners of the great estates in this district are noblemen and gentlemen, who reside at least half the year at their ancient family seats, which are surrounded by their own lands, well cultivated. These lands are partly in their own occupation, as farms and plantations; but mostly held under them by tenants at rack-rent, for lives absolute, for years determinable on lives, or by customs of manors. The situation and extent of their parks, and the elegant construction of their mansions, and of some public buildings in South Wilts, might perhaps vie with any residence or edifice in these kingdoms. But as the object of this Survey is to represent merely the Agriculture of the county, it is not thought necessary to give any description of them here.

SECT. II.—FARM-HOUSES AND OFFICES.

THE situation and construction of farm-houses and offices, are less variable in South Wilts than in many other counties. In general, they are crowded together
in

in villages, for the convenience of water, and are therefore frequently very badly situated for the occupation of the lands.

While the system of common-field husbandry existed in its original state, and every "yard land" had its farm-house, its yard for cattle, its barns, and its stables, and the owner resided upon it—such a situation had its advantages as well as its inconveniences.

In the present state of that system, wherever the small farms are occupied by the owners, the buildings are usually kept in tolerable repair; but if three or four, or more, of such estates, as is frequently the case, are rented by one farmer, the consequence is, that all the farm-houses, except the one he lives in, are left to labourers, and a great many of the out-buildings are suffered to go to decay; and at this day, the villages of the district in which the lands are not yet put in a state of severalty, may, for the most part, be seen in this neglected, ruinous condition.

Whenever a general division of the common fields shall take place, and the occupation of lands shall be confined to fewer individuals, which, whether right or wrong, will one day or other be the case, and when farms shall have found their own level—the greatest part of those unnecessary buildings must be removed, and new houses and offices, more conveniently situated, will doubtless be erected.

The anticipation of such an event prevents the owners from repairing so many useless buildings, and is the occasion of their remaining in such a miserable condition. Within the last 20 years, this system of erecting new farm-houses and buildings at a distance from the villages, has been practised in a most liberal manner, for the purposes of agriculture, by the Earl of Pembroke,

Pembroke, and other great land-owners of this district. But from the natural situation of the country, new pastures are not easily made in these distant spots; nor is water, fit for domestic uses, to be obtained without serious difficulty. So that a pretty general prepossession in favour of the ancient residence of man, with the advantages arising from the rivers and old pastures adjacent, will prevent any great extent of this otherwise desirable alteration of the homesteads: and perhaps the custom latterly adopted, in a great measure answers the good purposes here suggested, viz. the erection of a hill-barn, to receive the produce of the distant lands; and of sheds, with an enclosed well-sheltered yard, to protect cattle, which are here making manure, to be returned to the lands whence their support has arisen.

The houses and offices of the farms which have long been in severalty, and have been but little altered in their size, are frequently very commodiously situated, and in rather a superior style of convenience.

The buildings which are considered necessary for a South Wiltshire farm, are:

Three barns, or, at least, three thrashing-floors, to avoid mixing the different kinds of grain.

An additional barn is frequently built for wheat on low stone pillars, to keep out the rats and mice.

Stabling sufficient for the horses required on the farm.

A cow-shed, for the cattle that are wintered in the yard on straw.

A granary, pigsties, &c. with a close straw-yard, surrounded, if possible, by the buildings, and the house commanding a view of the yards.

A drinking-pool is requisite in the yard for cattle.

Although there are few parts of the kingdom where
farmers

farmers are more expert in making corn-ricks, and particularly wheat-ricks, than in this district, yet they are much too fond of putting their corn into barns instead of ricks; whence comes the complaint frequently made of Wiltshire corn, that it has not "a good hand," viz. that instead of being dry and slippery, it is damp and rough.

Their barns are indeed as well calculated as possible for the reception of corn; brick and stone walls being cautiously avoided, except for the foundations, and timber and weather-board used in their stead, and the covering being usually thatch.

In "catching weather," great barns may be convenient; but in general, they are more expensive to the landlord than advantageous to the tenant.

The general, and almost the only, material for barn-floors in this district, is two-inch oak plank, laid on oak sleepers; and to prevent rats and mice from burrowing under them, they are frequently laid on a bed of flints, or broken cinders.

In the parish of Kingston Deverill, an oak floor, which had been thus laid down 34 years, was, when taken up, found to be perfectly sound on the under side of the planks, while the surface had been completely worn away by the flail.

The frequent renewal of the floors of barns, is an object of consequence on a South Wiltshire farm, and it is seldom sufficiently attended to; so that their decay much oftener arises from their being laid too near the damp earth, than from any wear or injury they receive from the tenant. In my own practice I have known a prime oak floor, which was laid on the ground, become quite rotten in 15 years; and an elm one, which was kept

SECT. IV.—REPAIRS.

REPAIRS of the buildings have been usually done by the landlord, except thatching and glass windows, which are generally repaired by the tenants.

Repairs of the fences and gates are usually done by the tenants, after being first put in repair by the landlord; the landlord sometimes allowing rough timber for gates; but neither the fences nor gates are as yet a very expensive article on a South Wiltshire farm.

But latterly, it is not uncommon for the tenants to do the whole of the repairs, on being allowed brick, stone, tile, lime, and sawed timber; in all cases the landlord putting the whole into complete repair at the entry.

CHAP. IV.

OCCUPATION.

SECT. I.—GENERAL STATE OF THE LANDS.

WE have already remarked, that the ancient common-field system of husbandry has undergone very few alterations in this district. The introduction of it seems to have been very slow and gradual; the dispersed situation, and smallness of the prices of the common-field lands now in cultivation, evidently shew that the occupiers began with tilling a single acre*, or perhaps only half an acre each; and that, as a want of corn increased, they gradually enlarged their tillage, until they had cultivated all that was proper for that purpose, still leaving those parts of the lands which were not fit for the plough, or were at a distance from home, in a constant state of commonage; but by mutual consent, keeping the cattle out of the cultivated parts till the harvest was finished.

Hence the origin of common-fields. By the same kind of mutual agreement, they shut up, and in some cases enclosed, such parts of their common-pastures as were most proper to mow, dividing them into certain specific quantities, either by land-mark or by lot, and suffering the common herd of cattle to feed them again, from the time the hay was carried off till they were laid up for a new crop.

* One day's work for a plough.

Hence

Hence the origin of common meadows. These mutual agreements, originally founded in necessity, became, when approved by the Lords, and observed for a length of time by the tenants, what is called "Custom of Manors," constituting the very essence of the "Court Baron" or "Manorial Court," by which both Lord and tenants were, and are still equally bound; and of which, though the lord or his steward be the judge, the tenants are the jury.

The reasons which we have assigned for the small dismemberment of property which has taken place in South Wiltshire, relate to the land-owners; but it will be proper for us to enquire also why, notwithstanding the many beneficial alterations of the kind which have taken place in other parts of the kingdom, the occupiers in this district have so little promoted any improvements, by the abolition of common-field husbandry, and the bringing each person's property into fewer pieces, free from all rights of commonage. For although the district abounds with intelligent well-informed farmers, and though the modern improvements in agriculture cannot be adopted to any extent in lands lying in a state of tenantry, yet a large portion of the manors in South Wiltshire are still subject, either wholly or in part, to the same absurd custom of commonage as they were 200 years ago.

To elucidate this point, it will be necessary for us to consider the modes of occupation in the district.

SECT. II.—ANCIENT DISTRIBUTION OF THE LAND.

THE ancient distribution of the greatest part of this district was as follows: in general, there was in each manor

nor one great farm, called the lord's farm; which usually had its land in severalty and distinct from the tenants. The rest of the manor, called the tenantry part, was divided into small copyhold tenements or farms called "yard lands;" each of which was originally of nearly equal value, and enjoyed equal rights of commonage.

These tenants sent their sheep to one common flock, and their cows and plough oxen to a common herd, respectively under the care of a common shepherd and herdsman.

As the necessity of a common sheep-flock still continues for the sake of managing the common-field lands, a considerable number of these yard lands are still occupied in their original state of commonage; but the tenure of them is in many instances changed from copyhold to leases for lives; some are fallen into the lord's hands, and let at rack-rent; some are sold off in fee; and many of them are frequently occupied by one person.

The value of these yard lands, and the number of acres they contain, vary considerably in different parts of the district. There are many instances, where a yard land of about 25*l.* per annum contains about two acres of meadow land, 18 acres of arable (frequently in 18 or 20 pieces), and a right on the common fields, common meadows, and other commonable places, for perhaps 40 sheep, and as many cattle as they can winter with the fodder growing on the premises.

Inconveniences attending it.—Much of the singularity of the occupation of the lands in this district arises from its natural situation. The shape of the manors being, as was formerly explained, generally a narrow oblong, and frequently with the houses and buildings at one end, there are many instances where manors are full three

miles long, and little more than half a mile wide. The application of the land is almost uniform. The common meadows, of which the greatest part are watered, immediately adjoin the river; the houses and small enclosures as near to it as possible. Next follows the arable, until the land becomes too steep or too thin to plough, and then the sheep and cow downs; and frequently the woods at the extremity of the manor, and adjoining the downs or woods of the manors in the opposite bourn. In some instances, particularly where the bourns approach their junctions, and sometimes at the heads of the bourns, where the waters may be easily crossed, the lands belonging to each manor are partly on one side of the village and partly on the other; whereby the occupation is rendered more convenient: but these instances are comparatively few.

The difficulties attending the enclosing, or even laying in severalty, the commonable lands so peculiarly situated in great part of this district, will be afterwards explained.

SECT. III.—GENERAL CUSTOM OF FEEDING COMMONABLE LANDS.

THE custom of feeding the commonable lands, and the number of stock each commoner (or occupier of a yard land) has a right to put on them, varies in the district, but in general it is as follows:

Sheep Commons.—The common sheep-down is open for the common flocks during the summer and autumn. The unsown or summer-field is also open till it is ploughed

ploughed for wheat : after that the sheep have only the down till the harvest is over. When the corn fields are clear, the flock has those fields and the down till the winter obliges the owners to give them hay. Until this period, they are folded on the arable fields in a common fold ; but when they begin to eat hay, every commoner finds his own fold and his own hay, the common shepherd feeding and folding the whole. This is the ancient custom of managing the sheep stock in the district ; but latterly, as the value of stock has become more known to a South Wiltshire farm, the tenants of common fields have introduced the practice of folding their separate flocks on their own lands, thereby placing their sheep under the immediate care of their own servants, rather than entrusting them to a common shepherd, whose neglect or partiality made his attentions inadequate to the care of the whole. When the ewes are near yeanning, the owners take them home to their enclosed meadows, and by the time all the lambs have dropped, the water-meadows are ready to take them to grass.

In some instances the water-meadows are common for sheep stock in the spring, are mown in small known lots in the summer, and are fed by the common herd of cows in the autumn : in others, these meadows are wholly private property. Whilst the water-meadows are open, the sheep are folded on the barley land, and by the time the water-mead grass is eaten, and the barley sown, the summer field (especially if it be sown with ray-grass) is ready to receive the sheep, where they generally remain till near shearing time, when they go to the down until the stubble-fields are broken, at which time (perhaps about the middle of September) the rams are usually put to the ewes. The rams are

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provided,

provided, and the common shepherd is paid, at the joint expense of the commoners.

As this state of commonage, where there must necessarily be a great scarcity of winter food, requires a reduction of the sheep stock before winter, it is customary to sell off the old ewes and the wether lambs about Michaelmas, and to put out the ewe lambs to be wintered either on pasture land or turnips, in other parts of the same, or in an adjacent county. These lambs are usually put out from the 10th of October till the 5th of April, and the price is seldom lower than 7s., in some instances as high as 10s. per head; and yet after this diminution of the flock, the common-field farmers are not unfrequently obliged to buy hay for the remainder, and to fetch it from a distance of ten or fifteen miles.

Cow Commons.—Cow commons (called cow-downs) are frequent in the undivided parts of the district, but not general. They were more numerous formerly, many of them having been converted at different times into sheep downs by consent of the commoners. These cow downs are usually the best and most level parts of the down lands, and are worth from 6s. to 12s. per acre.

The common herd of cows begin to feed the cow downs early in May, usually Holyrood-day, and finish when the fields are clear of corn.

At the beginning and end of the season, they are driven to the down in the morning and brought back in the evening; but in the heat of summer they are only kept on the down during the night, and in the morning they are brought back into the villages, where they feed on the lanes and small marshes by the river side,

side, if such there be, till after the evening milking. When the stubble-fields are open, the cows have a right to feed them jointly with the sheep, and if there are common meadows, whether watered meadows or not, they have an exclusive right to feed them till the end of the commoning season, usually St. Martin's-day, 11th November, O. S. when the owners take them home to the straw-yards.

The cow-down, when the cows leave it to go to the stubble-fields, becomes common for the sheep flock during all, or a certain part of the winter, when it is again laid up for the cows.

SECT. IV.—SIZE OF FARMS, AND RENT.

THE present distribution of the land in this district, may in general be divided into two kinds.

1st, The farms in seyeralty, or those not subject to rights of common; these are in general from 150*l.* to 500*l.*, and a few manor farms to 1000*l.* per ann. and upwards.

2d, The tenantry yard lands, or customary tenements, which are subject to rights of common: these are in general from 25*l.* to 40*l.* per ann. and a few as high as 50*l.* per ann. Some of these are still occupied singly by the owners thereof, as copyhold or leasehold tenants of the respective manors; although consolidations of them are daily taking place, partly from the heavy expenses attending such occupation, and partly from their being allowed to fall into hand, to save extraordinary buildings.

Proper Size of a South Wiltshire Farm.

As the only difference between good husbandry and bad is, that the former, by raising a greater comparative produce, at a less comparative expense, returns more profit to the tenant, and thereby enables him to give a larger rent to his landlord than he could do by pursuing the latter ; it may not perhaps be improper for us here to enquire on what sized farm, in this district, a farmer will be able to effect this to the greatest advantage. This enquiry is particularly necessary at a time when great part of South Wiltshire is emerging into a new system, by the extinction of lifehold tenures, and the abolition of common-field husbandry. When this district was in a state of lifehold tenure, the size of farms was not always an object of the choice of the landlord, but of necessity ; and while the lands remained in a state of commonage, the occupiers were in an equal state of advantage, or rather of disadvantage. But in those manors where it is intended that the lifehold tenements shall fall into hand, and that farms shall be made out of them, it becomes an object of consideration, “ what is the most proper size of a South Wiltshire farm ? ” to ascertain the propriety of taking down unnecessary buildings, and to determine the number and situation of new buildings to be erected.

Much has been said and written about the proper size of farms. The policy of large farms has been very frequently and very ably disputed, and perhaps the possibility of their being too small in particular counties, might have been as clearly demonstrated, were it not an unpopular argument ; and there are few who would not rather have their judgment than their humanity called in question.

But

But after all that has been or can be said on the subject, the size of farms must always depend on soils and situations, and modes of husbandry; and every country has its level to which farms of a certain size are peculiarly adapted; and if they are much above or below this, they must be managed to the disadvantage of the occupiers.

Those farms are of the most proper size, which return the most proportional produce at the least proportional expense. This ought to be the great object of every land-owner. The object of every tenant is to live by his industry; if that industry will not allow him to live, he had better be a labourer.

In those modes of husbandry where the hands as well as the eyes of the farmer, and every branch of his family, can be fully employed, small farms can be managed to advantage. In dairy farms this is peculiarly the case, and it is frequently so in countries where the land is partly applied to breeding cattle and partly to raising corn; especially where lime, sea-sand, and similar manures, are to be fetched from a distance on horses' backs, as in Devon and Cornwall; and where the ploughing is entirely or chiefly done by the oxen bred on the farm; and even in some parts of South Wiltshire, where small farms are situated on sandy soils, they may be applied very advantageously on a garden system to the raising of esculent vegetables.

In these cases, where circumstances enable small farmers to do almost the whole of the necessary work with their own families, they can bring their produce to market on equal terms with the large ones. But on Wiltshire Down farms, where horses are necessary to plough the land and sheep to manure it, the little farmer stands on a very disadvantageous comparison with

the great one; being obliged to bear a much greater proportional expense in horses and servants. Every Wiltshire Down farm, if even so small as 60*l.* per ann. provided it is to be manured by the sheep-fold, requires a shepherd, a carter, and a plough-boy, and seldom less than three horses, but frequently four; and yet a farm of double the size may be managed frequently with one, or at the utmost with two additional horses, and with one, or at any rate with two, additional boys; for whether these servants and horses have or have not full employ, their expense will be nearly the same; and if the farmer take one branch of the active labour upon himself, the other branches are suffering for want of his superintending eye; and a farm of this kind furnishes very little employ for his wife and daughters.

The great object of consolidating farms is an increase of rent; but it may be laid down as a certain maxim, that this increase cannot be obtained unless a reduction of useless hands, and particularly of useless horses*, can be made by such consolidation.

In this district the consolidation of small estates has tended very much to diminish the number of horses, and it is chiefly by this reduction, that a small estate is frequently of more value to be added to a farm than to be occupied separately. But there must be a limit to the size of farms at which this advantage must cease,

* As a proof of the reduction of horses, by consolidating small estates, the parish of Monkton Deverill, which contains eight yard lands, was occupied 60 years ago by seven farmers, who kept 29 horses. It is now in four hands, and managed with 19 horses. The adjoining parish of Brixton Deverill, which 60 years ago was in six hands, and employed 43 horses, is now in three hands, and employs only 26 horses, and the size of the horses is very little increased.

and beyond which a farm may be too large to be properly or profitably managed.

The size of a Wiltshire farm should be therefore such as the master's eye, and one principal servant in each department, can properly conduct; and for this, one head-carter, with such a number of boys as may occasionally be wanted, and one head-shepherd, with assistance at seasons of urgency, will generally be sufficient.

The lowest size perhaps of a Wiltshire Down farm, that can be managed to advantage, is a good six-horse business; and the highest a twelve-horse business, or with one additional team of oxen at the utmost. Beyond this extent, two men are required in each subordinate capacity; a jealousy is excited between them, the master's eye is insufficient to command them, and a bailiff is necessary.

This business becomes then, to all intents and purposes two farms, and would certainly be better managed, if in the occupation of two farmers. But let me not be misunderstood. I do not mean to say that all the farms in this district, of a smaller description than a six-horse business, should be consolidated: this would be cruelty, as well as impolicy.

Where there are buildings proper for the occupation of farms in that state, and where tenants are settled on them, and from peculiar circumstances can live on them, and pay a rent equal to their value, they ought to be allowed to remain. The foregoing observations are only meant to apply to cases where new farms are to be made at the owner's option, and it is intended as much to point out the maximum as the minimum of farms; paying at the same time due deference to situations and circumstances, which will always furnish exceptions to general rules in Agriculture.

It

It is indispensable for the success of every business, and not less so in agriculture than in trade or manufactures, that a sufficient capital should be at command to conduct that business properly ; and no man should engage in a concern to which his capital is not so far equal, that he may neither be obliged to sell his commodities in a sinking market, nor be prevented by want of money from buying when he sees a proper opportunity.

SECT. V.—TITHES.

TITHES, in Wiltshire, are for the most part due in kind. There are few parishes wherein they have been extinguished by enclosures ; still fewer where any *modus* exists. Land, in some instances, has been given for tithes under enclosure acts, but the oblong shape of the manors, already noticed, renders this compensation disadvantageous to the land-owners. It makes a *new farm*, and by reason of the small quantity of home land, there is no room for the rector's farmer : the proportion of land due for corn-tithes taking so large a slice in an arable country.

A corn-rent, variable by the price of wheat, has been substituted as an annual payment for tithes ; but as very little of the arable land here is convertible to good meadow, the tithe-owners have in most enclosure acts suffered the tithes to remain unaffected thereby.

The disputes respecting tithes, and dues in lieu of tithes, of which common report has said so much in former days, are now but little known in this district. Farmers have begun to see the value of them, and clergymen

gymen have had confidence in professional men, to let them for moderate terms of years to their neighbours. There are numerous instances of parishes in South Wilts, where every occupier of lands rents his own tithes of the clergyman or impropriator. A mutual regard to their own interest has effected this desirable object, and the same principle is likely to maintain it. The composition paid for this property, is here usually fixed about once in seven years, or oftener if there be a new rector; and although it be acknowledged that a tenant can afford to give a high price for this portion of his own produce, rather than suffer it to go off his farm, yet it must be allowed on the other hand, that surveyors give the clergy a very liberal compensation.

The great tithes of a considerable part of South Wilts are in lay hands; in most instances left to the occupiers of the respective farms; in some to a proctor, who takes a whole parish in kind. It has been often noticed, and particularly by the clergy, that laymen *take up tithes* more than churchmen. The fact is admitted; but the obvious reason should accompany the assertions. Small tithes require much trouble in collecting, and breed much ill-will in a village, particularly where the produce of the yard is taken from a farmer's wife. Great tithes are collected in this district with peculiar ease, from the open state of the corn-fields, and the firmness of the soil to bear wheels at harvest. The interest of a farmer induces him to pay a handsome price for a part of his neighbour's crop, which is thus brought to his barn at a trifling expense, and from which he is enabled to increase his own produce by an extraordinary quantity of manure; whilst the same natural motive directs the clergyman to get rid of those difficulties which attach to a part of his dues,

dues, and if possible to preserve the peace of his parish. A resident clergyman wants but few of the productions of land. It is customary to reserve a quantity of straw for his stables from each occupier of tithes; and as the grass-lands are commonly kept in hand, he makes his own hay, or perhaps reserves a part of the farmer's crop at a given price, nearly equal to its real value.

SECT. VI.—POOR-RATES.

WITH respect to the payment of taxes, it was usual till within about 20 years, for landlords to pay the whole; but of late years, the poor-rates have increased so very much, that landlords have thought it necessary to subject the tenants to the payment of all parochial taxes, not altogether with a view to guard against an unnecessary waste of money in the temporary relief of the poor, but to prevent new burthens being brought on the parishes by the hiring of yearly, instead of weekly labourers, and thereby settling them and their future families on the parish. Reasons might be here adduced, why the landlord should pay a proportion of parochial taxes, particularly in a district where the land-owners reside near their farms, and are frequently the acting magistrates of the division; but latterly, there are so many applications for the renting of land, that the owners have been persuaded by the advantages held out to them, to throw the whole burthen on the tenants.

The average of payments to the poor, in parishes where agriculture is their sole employment, may be stated at from 2*s.* 6*d.* to 4*s.* in the pound; whilst in parishes

parishes where manufactures predominate, these assessments have latterly stood from 7s. to 14s. in the pound, on actual rents of the property.

SECT. VII.—LEASES AND ENTRY.

It is impossible to lay down particular rules here, for the mode of husbandry necessary to be pursued on a South Wiltshire farm during the term of a lease, or in what manner a farm ought to be left for a coming-on tenant. These things depend upon soils and situations, but they ought by all means to be positively settled previous to a tenant's entry. Nothing but this can prevent the quarrels which are continually happening between a going-off tenant and coming-on tenant in this district.

The indispensable necessity of an obligation on a tenant to pursue a regular course of husbandry on a Wiltshire Down farm, is a reason why farms should never be lett without leases in this district. In many counties leases are understood to be necessary only for the security of the tenant; but here they are absolutely requisite for the security of the landlord.

The term of years to be granted by a lease, should be so calculated as to bring all the land, or as much as possible, round in succession a certain number of times; so that the tenant may have just as many complete years' produce as he pays years' rent; and (supposing him to begin right), to leave the farm exactly in the state in which he entered upon it. The term should therefore be the one most divisible into the several periods of sowing the different kinds of land. From an
attach-

attachment to the common-field custom, most farmers expect to have liberty to sow some of their lowest and strongest lands with wheat every third year, and the lighter and more exposed parts every fourth; it is however now pretty generally allowed by the best farmers in this district, that corn should not be considered their principal dependence; wheat is therefore sown less frequently in even their strongest lands, nor are two white straw crops sown in succession. But the whole farm, and particularly the hill lands, are applied to a system of husbandry which, whilst it produces abundant food for stock, so as to enable the tenant to winter the whole of his sheep at home (formerly not attempted in this district), at the same time by a well-regulated process in the consumption of this winter food, manures his land in course for corn, without purchase or even carriage of dung; and thereby ensures him a regular quantity of grain upon two-thirds of the land heretofore applied to the growth of it. And as surveyors and land-agents have found lands under their care much improved by this course of cropping; covenants have been introduced in modern leases, binding the tenants to a due observance of it. In the old burnbeak lands, and the hill arable in general, wheat is not sown more than once in six years.

The usual terms for which leases are granted in this district, are sometimes seven years, oftener 14, now and then 21, but of late a term of 12 years has been thought the most eligible, as being more divisible into a regular course of sowing the arable land; and considering the disadvantages under which a Wiltshire Down farm is too often entered upon, the term of a lease should never be less than 12 years. He must be
a good

a good farmer indeed, or have very good luck, who (on lands fairly rented), can do more than save his own in the first four years of his term.

The tenant is bound to sow his lands in the course limited by the lease ; to keep up a full flock of sheep, and fold them in due course of husbandry, on some part of the premises ; but in the last year, on such part as the landlord shall direct, to spend all hay, straw, &c. on the premises (long wheat-straw sometimes excepted), to spread all the dung on the premises, except the dung of the last year's crop, and (if a Lady-day bargain) the straw of the off-going crop, which are to be left at the disposal of the landlord.

The old custom of South Wilts was almost invariably a Lady-day's entry. Indeed a Michaelmas one was not at all adapted to the customs of feeding the commonable lands of this district ; some old "severalty farms" had a Michaelmas entry, but those instances are few.

In the entry of South Wiltshire farms, the accommodation of the stock was originally the grand object. Corn seems to have been only a secondary consideration.

The reason appears to be this ; the basis of all agreements for renting land is, that every renter shall have a complete year's produce for a year's rent. When the greater part of the lands was stocked in common, the value of that commonage was of material consequence. The year's commonage was only complete when there was nothing left on the land for the cattle to eat ; and (on that account, perhaps) our forefathers fixed on Lady-day, for the commencement of their year, not only in their agricultural, but also in their civil establishment.

The introduction of the new style altered the time of
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the commencement of the civil year, except in the yearly assessment of taxes, in which it is still retained.

The abolition of commonage wherever it has extended, has in a great measure changed the commencement of the agricultural year.

South Wiltshire, as one of the last districts to retain its common rights, observes the old custom of a Lady-day entry, wherever those rights exist.

The general custom of a Wiltshire Lady-day entry is, that the rent commences at Lady-day, at which time the tenant enters upon all the grass ground, and brings on his sheep and cows, and lays up the meadows for mowing. In some instances the off-going tenant holds over part of the meadows till the 14th of May. But the more proper mode of quitting and entry at Lady-day, to ensure the full value of the produce of the land, would be, that the coming-on tenant should take possession of all the water meadow-land (provincially "take up the meadows"), at Christmas before the entry, and the residue of the meadows and pastures at Lady-day. By this regulation, which might be accomplished at a small expense to the landlord in the first instance, the valuable spring-feed of the water-meadows, and the full crop of grass on the other lands, would be continually secured to the coming-on tenant, and the advantages to the two farmers would be more nearly balanced upon every change of occupation.

On the arable lands, the off-going tenant sows and keeps all the crops of corn, not only the wheat that was sown at the preceding Michaelmas, but also the Lent corn that is sown in the spring in which he quits. The new tenant, therefore, not only gets no produce from his arable land for his first year's rent, but has no return for

for it till he quits the farm, when he, in his turn, takes an off-going crop.

The new tenant, who is probably at that time quitting another farm held by the same kind of tenure, brings on his horses and oxen as soon as he has finished sowing his own off-going crop, and begins to prepare on his new farm for wheat.

- The off-going tenant takes his horses and oxen away at the same time, to make the same preparations on the farm which he is then entering.

The usual time fixed for the entry of the new tenant to carry out dung and prepare for wheat, is in some parts of the district the 14th of May* ; in others the 24th of June.

This entry should in no case be later than the 14th May; the whole of the land should be ploughed by 24th June.

The old tenant keeps part of the house and stable, and the new tenant has the other part to prepare for his next crops, and to take charge of his cattle and make his hay. In this intermixed state, the two families live for upwards of a year, viz. usually till the Midsummer twelve-month, after the new tenant's rent commences. The old tenant likewise keeps the barns till that time, to thrash out his corn, the new tenant not wanting them till the ensuing harvest, except at sheep-shearing, when they are open to him.

Since the introduction of artificial grasses, the new tenants are allowed to sow them in the off-going tenant's last crop of Lent corn. Hop clover and ray-grass are usually sown; broad clover is generally objected to by

* Holyrood-day, 3d May, O.S. This, in tenantry manors, is the usual day of sending sheep and cattle to the downs or common-pastures.

an off-going tenant, lest it should injure his barley crop. But the above custom being certainly much to the disadvantage of a coming-on tenant, has been altered in some farms, and particularly subsequent to enclosures, to the following, viz. the off-going tenant takes the wheat crop only, and agrees to fold his sheep till Lady-day for the Lent crops which are to be sown by the coming-on tenant ; and if the folding and dunging could be insured to be done properly, this is the best entry in a sheep-folding county. A Lady-day's entry, especially in the old system, is best for the landlord, because a tenant must have a full year's rent in capital (to enable him to stock the farm) more than is necessary on a Michaelmas taking.

CHAP. V.

IMPLEMENTS OF HUSBANDRY.

SECT. I.—PLOUGHS.

THE ploughs used in this district are chiefly of two kinds:

1st, The hill country two-wheel plough, with the point of the beam elevated, and swinging upon a brace between the wheels, and the draft chain fixed almost at the centre of the beam.

2d, The one-wheel plough, so made as to be used with a foot instead of a wheel, in case the land is so wet that the wheel clogs, and will not run round. These ploughs are about eight feet, or eight and an half long in the beam, and have a long mould-board set at a very acute angle with the sole of the plough, and bent so as to turn down the furrow, or rather that the furrow may drop from it, as flat as possible.

The two-wheel plough is chiefly used on thin flinty land, where deep ploughing would do mischief, and where in ploughing shallow, the stones are liable to strike the plough out of ground. In such soils the farmers are very sensible that a much lighter, and more simple plough, would answer as well, or better, provided it was always used by careful experienced ploughmen; and the increase of good ploughmen has occasioned the two-wheel plough to be thrown by in many parts of this district, as expensive and cumbersome.

The single-wheel and foot-plough is the most general plough now in use throughout this district, as being applicable to light or heavy land, deep or shallow.

Many attempts have been made to introduce new ploughs into this district, particularly the Norfolk and other light ploughs, and the double-furrowed plough, but as yet without much success. Perhaps the reason may be, that in the present common-field state of the district, almost every farmer has heavy land to plough as well as light, and frequently both in a day, and what is worse, land that is often so full of couch that the roots make as much resistance as the land, and are continually choking up the plough. These reasons have hitherto prevented any lighter or more simple ploughs from coming into general use, particularly those whose mould-board is short and obtuse. The same reasons have hitherto induced the farmers of this district to plough almost continually with three, and sometimes with four horses. Their heavy white land, and their steep hills (which they are frequently obliged to plough up and down, on account of the narrowness of the common-field lands), require three or four horses, while some of their level thin flinty loams might almost be ploughed with one. But as these changes of soil and situation occur almost daily to every common-field farmer, they are, whilst under such a system, in some measure obliged to have at all times in the field strength enough for each sort of land. Those farmers who have their lands in severalty, and in large pieces, are not behind-hand in introducing and using ploughs best calculated for their respective soils. But till latterly, the majority of common-field farmers was so great, that the county had acquired an almost general character of being bad ploughmen. It is but justice to say, that
necessity,

necessity, and not a want of judgment, frequently made them so. By the numerous enclosures, or rather divisions of their common-fields, which have occurred in Wiltshire during the last twenty years, the occupiers of land have been enabled to exert themselves in this essential branch of agriculture; and it is presumed that the ploughing of land on most of the severalty farms in this district, is at this moment at a height of improvement which may challenge the farmers of any part of the kingdom.

SECT. II.—HARROWS.

THE same kind of harrow is used in this district, and in nearly the same manner as in all the western counties. Two or three horses go a-breast, each drawing a harrow diagonally, all the harrows being fastened together with a lay-over or rider.

SECT. III.—DRAGS, DRILLS, PLOUGHS, &c.

THESE instruments, and their uses, are mentioned fully in Chap. VII. Sect. 1.

SECT. IV.—WAGGONS.

CARTS and waggons are both used in this district for carrying out manure, but only waggons for hay and corn. The carts are made deep and capacious, for the purpose of carrying out dung, and are in general so

heavy and clumsy, as to be fit for scarcely any other use: they would indeed be almost too heavy for a horse, were it not that, in consequence of the general situation of the Wiltshire farm-yards, the greatest part of the dung is to be carried up-hill. They are seldom drawn by less than three horses, and frequently by more.

The waggons are rather handsome, but in general are too heavy. They are made with a crooked bed, about 12 feet long and four feet wide, and run generally about six feet wide on the ground. They have a narrow band of iron, just to cover the wheels, but seldom have any over-layers or out-riggers, either at the ends or sides; the great size of the bed, and the general mode of binding the loads of hay and corn with a waggon-line (on account of the steepness of the hills), enabling them to carry large loads without those aids. The diameter of the fore-wheels of a Wiltshire narrow-wheel waggon is about four feet four inches, and of the hind-wheels, about five feet eight inches. The waggon weighs from 19 cwt. to 22 cwt.

CHAP. VI.

ENCLOSING.

SECT. I.—CASES BY ACT OF PARLIAMENT.

THE division or enclosure of commonable lands in this district, from the time this work was published by the original compiler, has been, in number of parishes, to an extent perhaps unequalled in any of the south or western counties. At that date (in 1794), full one half of the manors in South Wilts, were, upon accurate enquiry, found to be in a state of tenantry; but at the present day there is less than one-fourth part undivided, and the application to parliament for enclosure bills are annually increasing.

The causes which have already been mentioned as tending to keep South Wilts in a common-field state, viz. the peculiar shape of many manors, and the local difficulties sometimes attendant on a division, still continue to operate, and will necessarily protract a general enclosure to a distant period.

Many advantages have certainly been derived from the enclosures already made; and it may be proper now to state the probable advantages to be expected from enclosing, or at least dividing, and putting in severalty, those lands that are yet in a state of commonage, and to point out the most practical means of obviating such difficulties as will necessarily arise from a new order of things, in a country less favourable than many others to improvements of this description.

Disadvantages of the Common-Field Husbandry.

The peculiar disadvantages of the common-field husbandry are, the obligation of ploughing and cropping all kinds of soil alike ; the almost total preclusion that a common flock makes to any improvement of sheep stock ; the difficulty, and, in some instances, the impossibility, of raising sufficient hay or green winter food, for the flock, though reduced in number by sales in the autumn, and by putting out the young ewes for the winter ; and particularly the very great expense and trouble, and the additional number of horses necessary, in occupying lands in detached and dispersed situations.

Advantages to be derived from its Abolition.

The advantages to be derived from a removal of these impediments to good husbandry, need not be enumerated—they speak for themselves ; but it must be remarked, that, in many parts of this district, these advantages apply much more forcibly to the case of the great farmer than the little one.

The commonable lands of the district usually consist of three or four arable fields, a common sheep down, sometimes a common cow down, and in some instances a common meadow. The custom of a division has been, to give every land-owner an allotment of arable land in one or more of the fields ; a sheep down, as near the arable land as possible ; and a portion of the common meadows, if there be any : but of these, it is seldom thought necessary to enclose any, except the common meadows, and a small part of the arable land near home.

The

The farmer of about 200*l.* per annum will, perhaps, in consequence of having his land put in larger pieces, be enabled to reduce his number of horses one-third ; he will have it in his power to sow clover, sainfoin, &c. for hay, and to raise turnips and rape for winter food for his sheep ; and consequently, he will not only increase his flock, but he will also winter them at home ; and although, by this mode of husbandry, he must necessarily reduce the number of acres of corn, yet, as he will be able, by his additional number of sheep, to manure his land much better than he did under the old system, he will probably raise more grain than he did before.

Not so with the occupier of 40*l.* a year upon Wiltshire Downs : he will certainly have the conveniency of having his land brought together in fewer pieces ; but as it seldom happens that he could plough his land with fewer than three horses before such a division, neither can he now do with less. He has no enclosed pasture to put these horses in, nor common to turn them on ; his right on the Downs being too small to make it worth his while to take an allotment for a sheep down (of perhaps 20 acres, two miles from home), he takes an increase to his arable land, in the fields near home, in lieu of it : but now he can keep no sheep on this allotment, nor would it be worth his while to employ a shepherd for so few, if he could ; without sheep he is driven to some expensive manure to dung his land, because having little pasture land, and no cow commons, he can keep no cows to make dung with his straw ; and the arable land being in general so little adapted to turn to grass, he is prevented from enclosing his allotment, and laying it down to pasture.

It may be answered, that the peculiar locality of
great

great part of this district is such, that it is not calculated for the separate occupation of farms of 40*l.* a year; and that though the owner of such a farm cannot live upon it when put in a state of severalty, and is really injured, provided he occupies it himself, yet he may lett it for one-third more than he could when it was in a state of tenantry.

I allow this argument in its full force, and if it were now required to *colonize* a parish in South Wilts, it would not be prudent to make the division of farms so low as 40*l.* per annum: but men of this description are already here; they are settled on the spot; it is, in many instances, their own; justice will not let them be dispossessed without their consent—policy and humanity forbid they should be injured, even with their consent.

These difficulties are all obviated in parishes where there are veins of sand land: there the little farmer has really the advantage of the great one, provided the allotment of the former is placed, as it ought to be, in that kind of land; and this should be the first object in all enclosures where there is land of that description.

Great part of the sand land in this district is peculiarly applicable to all the purposes of a small farmer, or as it perhaps may be better termed, a garden farmer.

As quickset hedges will grow well upon it, it may easily be enclosed; and it will, if required, turn readily to pasture, so that cows may be kept on one part to make dung for the other.

If sheep-folding be necessary, crops of clover for hay, and of turnips for winter food, may be raised, on which sheep from the Down farmers may always be taken in to winter; and with proper manure, such land
will

will bear perpetual crops of almost any kind of corn that may be required ; and this land is peculiarly applicable to the culture of potatoes, pease, and such other crops as are the particular province of a small farmer, and in which he may, if he pleases, use the spade instead of the plough.

These ideas are not chimerical ; they are already carried into practice in many sand parishes that have been lately enclosed in this district, and the improvement has been almost inconceivable.

But in those parts of the district where there are no sand veins, it is, as has been already stated, difficult to mend the situation of the little farmers by a general enclosure.

There is a mode whereby they may at least be secured from being injured, and this has been adopted in some late enclosures, by setting out the allotments of arable land to men of that description, adjoining to each other, in one or more of the fields ; and directing the same to remain still in an unenclosed state, with a common-right of sheep-feed for each person over the whole, and also a common allotment of down land, and another of water meadow, if it is to be had conveniently, and some enclosed pasture to each, if possible. Under these circumstances, men of small property will be enabled, after an enclosure, to keep a common flock of sheep, and a common shepherd to attend them ; and their situation will in some degree be ameliorated, as their land will be generally laid together, and near their buildings. And as the rules by which they are to enter common will be settled by the authority of the Commissioners of the enclosure, they will not be liable to be trespassed upon and injured by each other, or by their more opulent neighbours. Notwithstanding some
little

little sacrifices may be thus made to the interest and comfort of the small farmers in an enclosure of the commonable fields, and other commonable lands, by awarding their allotments near home, or in soils and situations the best adapted to their occupation, it is not difficult to shew, that the great farmers will still be very considerably benefited, as well as accommodated; for although the oblong shape of many of the manors of this district will oblige the great farmers to take much of their arable land at some distance from home, yet such land will have the advantage of being near its natural dunghill, the sheep down; and as it will, of course, be valued low, on account of its remoteness, the owners will be enabled to bear the expense of erecting barns on it, and will in effect "bring the land near home," by reducing the trouble and expense of carrying the dung out, and the corn home to the yards.

South Wiltshire not so improvable by Divisions of Common-Fields as many other Counties.

Upon the whole, however, it must be confessed that, on account of the peculiar shape of many of the manors, the general application of the land, and the modes of husbandry necessary to be pursued in it, the difference of rent and produce between common-field lands and lands laid in severalty, though in many cases it be very considerable, is not so great in this district as in many other counties where the like obstacles do not exist.

But surely, because the value of estates cannot be trebled on some parts of this district, as it has been in other counties, by an enclosure, it does not follow, that an increase of one-half, or even of one-third, on the
present

present rent, is not a desirable object, especially when it is to be accompanied with the pleasure, which every man must feel, of occupying land in the way he chuses, and applying it to the uses for which Nature designed it, without being subject to the caprice or ignorance of his neighbours; and particularly when it enables him to provide sufficient winter food for his sheep stock, without being obliged to buy hay for them, or to put them out to be kept by others.

SECT. II.—EXPENSES.

IN the article of the expense attendant on a general division of commonable lands (which in some counties is a very serious consideration), South Wiltshire, and the other sheep-folding districts, have a great advantage, as it is seldom necessary to fence the new allotments, except perhaps a small quantity of land near home. In these counties, where sheep are folded every night, and are never without a shepherd in the day, hedges are seldom necessary for the distant lands; and indeed there are many situations in South Wiltshire, where hedges would never grow to perfection.

SECT. III.—RISE OF RENT.

It should always be remembered, that a lasting improvement in the land, and not merely a temporary advance in the rent, is the great object of enclosures. The soil of Wiltshire downs may in unskilful hands soon be made worse. A state of "severalty," where
every

every man can manage his land as he pleases, is certainly infinitely preferable to one of "tenantry," where all are obliged to pursue the same system. But it must be remarked, that although the common-field husbandry does not make the land better, it keeps it from becoming much worse; and as all men are not equally good judges of agriculture, there have been instances of a whole parish or manor, without any relaxation in the industry of the tenants, but merely by their proceeding upon a bad system of husbandry, producing less, both of corn and stock, after a division of common-field lands, than it did before: a convincing proof that, however the rent might be increased, the mode of husbandry was certainly not improved. In short, the remark frequently has been made, that "severalty makes a good farmer better, and a bad one worse."

These errors have arisen principally from understocking or over-ploughing, or both, viz. by reducing the sheep stock, the basis of the Wiltshire Down husbandry, under an idea of keeping it better, or by reducing its means of subsistence, by ploughing the down and increasing the quantity of arable land. It cannot be too often repeated, how indispensable the sheepfold is to Wiltshire husbandry, in every division of common-fields in this district. It should therefore be the first object of Commissioners, to enable every farm to keep up a proper sheep stock, by allotments of those kinds of land which are necessary to support that stock, viz. water-mead, if it can be had; but above all, a proper and convenient sheep-down, sufficient to support the arable land: and it highly behoves the owners of those farms, at least those who look forward to the good of their heirs as well as themselves, to take care
in

in letting such farms, so to fix the course of husbandry, that it be put out of the tenant's power to make them worse. Every farmer who is honest, would heartily agree to this; every one that is otherwise, ought to be obliged to do so.



SECT. IV.—EFFECTS OF ENCLOSURES ON POPULATION.

THE population of the manufacturing part of this district has increased rapidly during the last century, whilst it has evidently decreased in those parts remote from the manufactures; but the enclosures of open lands in this district have been too recent to have produced as yet any sensible effect on its population. The circumstance, therefore, must owe its origin to other causes; but the effect which future enclosures, and the consequent improvements in agriculture, will have upon the population of this district, is obvious. South Wiltshire is the granary, not only of the manufacturing towns within the county, but also of those in the east part of Somersetshire; and it sends very considerable quantities of wheat and barley to the cities of Bath and Bristol.

Every enclosure must have improvement for its object: that improvement must be derived from an increased produce; and that produce being chiefly human food, must be capable of supporting a greater population somewhere.

But with respect to individual parishes, the effects of enclosures will be various; in some the population will be increased, in others it will be diminished, according

ording as the nature of the soil, when applied to the purposes for which Nature designed it, shall require more or less manual labour for its cultivation. The common argument on the influence that enclosures have upon population in a corn country, is this, viz.

“ Arable land requires more manual labour than pasture ; those enclosures therefore, which tend to increase the quantity of arable land, or the quantity of produce on the same quantity of arable land, must certainly increase the population on the spot, besides furnishing the market with an additional quantity of food, for an increased population elsewhere.” This argument, though very plausible, and, taken in the abstract, perfectly just, will not apply to South Wiltshire in general, and especially to the villages on the Downs. The abolition of common fields, will naturally promote a gradual abolition of lifehold tenures, and a consequent consolidation of small farms. This alteration will of course decrease the number of farmers ; and as the large farmers will be able to cultivate the same land, with proportionably fewer horses and servants, than small farmers can, it will also reduce the number of labourers ; and yet notwithstanding this reduction, the great farmers will be enabled to send a greater quantity of provisions to the market, and consequently, to feed an increased population elsewhere.

It may be said in answer, that no hands will be thrown out of employ but such as are unnecessary, and that such as are uselessly employed in agriculture are of no real service to the community, and would be much better disposed of in manufactures.

How far this shifting of population from villages to towns, may be right or wrong, it is not my province to determine.

It

It does not follow, that if no enclosures were made, no consolidation of farms would take place. The contrary is the fact; small estates, whether held by lives, or at rack rent, are every day consolidating in the parishes where common fields still remain; and for a very obvious reason, viz. that in the system of Wiltshire Down farming, the saving of expense, in managing two or three small estates together, enables a farmer who is already in possession of a small estate, to give a greater rent for another, than any one, who intends to occupy it separately, can afford to give.

An enclosure only tends to accelerate an effect, which a number of causes would in time produce without it; viz. the bringing farms to such a size, that the greatest proportionable produce may be obtained at the least proportionable expense.

CHAP. VII.

ARABLE LAND.

SECT. I.—TILLAGE.

ALTHOUGH it be not possible that any improved system of agriculture can be introduced *generally* into common fields, yet there have not been wanting, in the district of Wiltshire Downs, intelligent enterprising men, who have observed and remedied many of the errors of their forefathers, and particularly in the article of ploughing; and the old system would have long since undergone a total change, if the tenantry fields could have been abolished. One of those errors certainly was the pulverizing, by repeated summer ploughings, land in high exposed situations, whose principal fault was that of being already too light; they saw that this management, particularly if it were practised near the time of sowing, filled the wheat crop with weeds, especially with the red poppy; that, though the wheat grew very luxuriantly during the winter, the March winds, particularly after frost, frequently blew the earth away from the plant, and left it (as the Wiltshire phrase is), “hung up by one leg,” without any sustenance to the coronal root, which at that season it should be forming; that the crop was in consequence *knee sick*, that is, “not strong enough in straw to support itself,” and of course, produced small thin ears.

Many

Many modes have been introduced to prevent this evil, by giving a sufficient texture and firmness to the land previous to a wheat crop. The best farmers have made a point of getting their lands clean ploughed by Midsummer, and treading it as firm as possible with the sheep-fold a long time before sowing; while the slovenly farmers have invented, and generally practise, a very short and cheap way of attaining this firmness in the land. They rafter the land (as they call it), that is, they plough half of the land, and turn the grass side of the ploughed furrow on the land that is left unploughed. They do this as soon as they can spare the feed of the summer-field, and leave it in that state till near seed time, when they harrow it down and plough it for sowing. This rafter is usually ploughed across the ridges, or what is better, diagonally; the latter mode being less subject to drive the land up in heaps before the plough.

The land thus raftered is sometimes ploughed twice, but more frequently only once, previous to sowing; and after it is sown, they drag it two, three, or four times, and harrow it four, five, or six times, viz. (provincially speaking), they give it "so many tine with the drag, and so many with the harrow."

It is wonderful how very general this raftering or half-ploughing of land for wheat, is in this district; it frequently produces as good a crop as the best management; but the foul state the land is left in for the next crop, must explode it as a system, whenever tenantry-fields are put in a state of severalty.

The peculiar churlishness (provincially, "clottiness") of a great part of the lands of this district, arising perhaps from the cold nature of the sub-soil, makes this husbandry, bad as it is, to be preferred in general.

to sowing wheat on one earth, unless it be on the sand lands.

It may be proper perhaps here to remark, that the Wiltshire Down farmers have of late years carefully avoided ploughing below the top-soil. Wherever there is a vein of rubbly chalk, or of small broken flints immediately under the top-soil, they look upon it as the "*dross of the land*," and that if it be ploughed up it is quite poison to the field. Many instances are shewn where land of this kind, ploughed too deep (frequently single acres in large tenantry fields) upwards of twenty years ago, has not yet recovered its former goodness. And to keep the top-soil as deep as possible, the best farmers will not permit the surface flints to be picked off for the roads, lest it should make the land both lighter and thinner. But on the sand veins where there is a great depth of soil, especially about Levington, it is not uncommon to plough very deep; and to have a second plough following in the furrow of the first, so as to throw up new soil, and to bury that which is supposed to be exhausted, as is the case in many parts of Devonshire.

A very heavy kind of drag is used for cleansing the land, the tines of which are very strong, and nearly a foot in length. This drag is made oblong, and two of them are hooked together like two doors.

As Wiltshire Down farmers are very cautious of ploughing their land too much, they make much use of these drags instead of ploughing, and frequently let in their seed-wheat with them. This practice having been found to answer, has been gradually improved upon.

For some years a very heavy triangular machine was used, called an A. drag, with its tines so fixed on its
three

three sides, as that when drawn by one point, it made parallel furrows eight or nine inches apart. On these furrows they sowed their wheat broad-cast, and afterwards, by lightly harrowing the ground in the same direction as the furrows, they got a great part of the seed into the furrows, and the rest took its chance. But this machine not going perfectly steady, has been still further improved by putting the tines on two parallel beams, usually four before, at distances of 18 inches, and five behind, working between them so as to make parallel furrows of nine inches apart. This is drawn much like a drill plough, and held by two handles behind; and is called a nine-share plough, or where made with 11 tines, an eleven-share plough.

The shape of the tines has also been altered; instead of being straight they are bent at bottom, the leg part large and hollow, and the foot solid and pointed. These are made strong enough to root up the ground, if ever so hard, into furrows of a proper depth for sowing: over these furrows they sow their corn as above described.

All these attempts, though answering the end of keeping the land as solid as possible, were only approximations towards drill ploughs, but with this difference, that one-third of the seed was deposited at improper depths, or left at top for the birds. Drill ploughs have been introduced in the sands of the district, and used with great success.

They have been tried in the flinty loams, but have not been brought into general use. The hill-farmers contend that too much of the land is exposed to the summer sun, and the ears of corn die in consequence, short and unproductive. But in the sand veins of this district drilling of all kinds of corn is much in use. In such soils where the use of the hoe is one of the greatest

advantages to be derived from drilling, Mr. Cook's plough (so made as to be afterwards used for horse-hoeing) is chiefly used.

Comparison between Drill Husbandry and Broadcast.

It is not for me to decide on a subject on which both the best writers and the best farmers in the kingdom have so long been divided in opinion, viz. "Whether drill husbandry is, or is not, superior to the broadcast?" They have both undoubtedly their merits, or neither would have been so long and so ably defended. Different soils and situations require different management; some are particularly adapted to one kind of husbandry, and some to the other.

In sand lands drill ploughs are certainly of use: where the seeds of all weeds being sure to vegetate, repeated hoeings are necessary to prevent their choking the corn. If there are any who doubt it, the sand veins of Wiltshire will convince them.

Perhaps strong clays may furnish objections to drilling, and particularly to drilling wheat; nor does such land require hoeing like the sandy soils. But it ought to be considered that Nature supplies the use of the drill plough in strong clays, especially under their favourite crop, "wheat." The clods at the time of sowing, are a gauge to determine the proper depth of every wheat corn, and the pulverization of those clods by the winter frosts and the March winds, is the hoeing of nature instead of that of art, and as in such soils the weeds are too few, and grow too slow, to do any mischief, no other hoeing is in general wanted.

It may be said, that time and experience will one
day

day decide this argument; but reason must also be called in to determine, how far the influence of particular seasons may affect experiments in particular years. It is this influence, and not a want of observation in farmers, that has hitherto prevented, and will always prevent, agriculture from being reduced to one general invariable system. What is right one year, and even for years together, may another year be wrong; and that farmer who happens to suffer severely by pursuing a right system in a wrong year, is shy of it for ever after, especially if he has suffered by deviating from any old mode to which a popular opinion has been long attached. In this case he not only suffers the loss of his property, but he is sure to be laughed at by all his neighbours, and even by his own labourers.

As many of the light lands, where ploughing is very little required, unless to destroy the weeds, Mr. Cook's instrument, called a scuffer, which will clean five or six acres of land per day, has been used with great success, and particularly preparatory to drilling.

SECT. II.—FALLOWING.

FALLOWING is very general in South Wiltshire.

The word "fallow" bears in this district, as well as in many others, two significations, and means either "a frequent ploughing and pulverizing of land to make it lighter, and clean from weeds when it is become foul by repeated crops;" or, "a mere rest of the land when it is exhausted:" but the end in view is the same in both practices, viz. to enable the land to bear

a fresh succession of crops. As these practices have been of late much reprobated by several writers in agriculture, and as strongly defended by the Wiltshire farmers, it will be proper for us to enquire into the reasons given by the latter for a continuance of this mode of husbandry.

The science of agriculture is nothing more than "to discover and cure Nature's defects;" and the grand outlines of it are, how to make "heavy land lighter," and "light land heavier;" "cold land hotter," and "hot land colder." He that knows these secrets is a *farmer*; and he that does not know them, is *no farmer*. But for want of attending to these general ideas, many absurd doctrines have been propagated respecting agriculture, and in no instance more than in the article of fallowing land, which it has been very common, of late, to condemn in the gross, as a mere waste of labour and loss of crops.

If by fallowing, be meant repeated summer ploughings, it follows, that on some lands it is proper, and on others totally wrong. It can never be right to make land lighter, that is too light already; but there are few instances where strong heavy land can be pulverized too much. It may be replied, that this pulverization may be as well effected under crops, as in a state of fallow. On some soils it may—on others it cannot.

In the richest part of the sand veins in South Wiltshire, particularly in the Pewsey Vale, fallowing by summer ploughings has been found to be totally improper; such land will not bear a fallow: it can never be made too close, if it be kept clean; and on such a soil, this can be done better with a crop than without one. In common fields, where the course on such land is

two crops and a fallow, or, as in some, three crops and a fallow, the fallow year fills the land with more weeds than can be got rid of in the succeeding round of crops.

The down lands of this district will not bear fallowing, especially in hot dry weather: they are too thin and light already.

But when the objection against fallowing is made solely as the loss of a crop, it may be asked, whether vegetable, as well as animal strength, when exhausted, does not require both food and rest to restore it? and where less of the former can be procured, recourse must be had to more of the latter. Every good Wiltshire farmer will say, that, upon the Downs, two years' rest for wheat is equal to the best coat of dung. Dung may give the *quantity*, but rest must give the *quality*.

SECT. III.—COURSE OF CROPS.

UNDER the common-field husbandry, little or no variation of crops could take place: wheat, barley, and oats, were the principal grains thought of; and the first object always was, to get the wheat crop round as often as possible, whether the land was good or bad, deep or shallow.

Before the introduction of artificial grasses, the arable lands of each manor were usually laid in three common fields, of which the course was, 1. Wheat; 2. Barley, or oats; 3. Fallow.

In some manors, the course was worse, viz. 1. Wheat; 2. Barley; 3. Oats; 4. Fallow.

But the tenants in many of the common fields, being
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at length convinced of the advantages arising from artificial grasses, came to an agreement to sow ray-grass, clover, &c. in all, or in some part of their spring crops, instead of suffering the land to lie fallow. In some instances, they altered their fields for this purpose, by making four fields where originally there were but three: in others, the three fields still remain, and the grass stands but one year. In the old four-field system, they sometimes sowed the barley field, and at others the oat field, with grass; but there are still a few common fields in which the introduction of artificial grasses has not generally taken place.

General Course of Common-Field Husbandry.

In those common fields where the occupiers can agree to sow clover, the following may now be said to be the general courses of husbandry :

First, three-field husbandry : 1. Wheat ; 2. Barley, with clover ; 3. Clover, part mowed, part fed.

Secondly, the bad four-field system : 1. Wheat ; 2. Barley ; 3. Oats, with clover ; 4. Clover, part mowed, part fed.

But neither of these systems can exist without a good sheep down ; as only half a field is open to the flock during the early part of the summer, and none at all after the land is fallowed preparatory to wheat.

This difficulty has therefore given rise to a better four-field system, viz. 1. Wheat ; 2. Barley, with clover ; 3. Clover, mown ; 4. Clover, fed until it is necessary to plough for wheat.

But in this course of husbandry, the common-field farmers have thought some of the land too good to lie still for two years ; instead, therefore, of sowing the whole

whole of the barley field with clover, they have reserved one-third, or one-fourth of the best of it for vetches, pease, beans ; and of late years for potatoes ; for the two years during which the other parts of the field are in clover ; but taking care to have it ready to come in course with the rest of the field for wheat.

This part of the field is called a *hook-land* or *hitch-land* field, and when thus applied, it is discharged from commonage ; but it becomes again subject thereto when in a state of wheat-stubble, or barley-stubble.

Perhaps this is as complete a system, for a great part of this district, as the nature of common fields will allow.

From the preceding observations on the different courses of husbandry, it is evident that a wheat crop makes part of every round of the common-field arable land. The tenantry fields having been originally laid out without much regard to soil, the light thin lands on the hills are frequently obliged to carry wheat every third or fourth year, because the deep strong lands in the valley are able to bear it. This crop is of course sometimes dearly bought, by the great quantity of manure used in preparation for it, to the detriment of the rest of the farm, especially of the turnip crop, if there be any.

The old custom of the tenantry fields of Wiltshire was always, and in all soils, to give a year's fallow previous to a wheat crop : they did not, indeed, always plough the land, but allowed it to run to couch-grass, thistles, and other weeds. The introduction of clover and ray-grass has abolished this in the three-field husbandry, as in it they cannot prepare for wheat until the grass crop is mown. In the four-field system, where the clover is sown the second year, and mowed the third, the field becomes in the fourth year what is called, in Wiltshire,

Wiltshire, "a summer field," and is ploughed up at different times, according to the custom of the different manors. In some instances they give an outright winter and summer fallow; in others, they begin ploughing at Holyrood-day (May 3d, O. S.), and in some as late as Midsummer.

The lands that are sown in a round of three fields, being usually the deepest and strongest, can have but little ploughing (although they want the most); the time being too short, after the clover crop is mown, to admit of it.

Those lands which are lighter, and farther from home, and are usually sown in four fields, require the least ploughing; and yet they frequently have, or at least formerly had, the most.

Such are the absurd consequences of a common-field system!!

Rotation of Crops on the Severalty Farms.

Having stated the general rotation of crops in the common-field system, and the attempts that have been made to approximate as near as possible to good husbandry, till that system be abolished, we will now proceed to notice the management of severalty lands in a state of tillage.

We have already observed, that the principal soils under tillage in this district are the white land, the flinty loams, and the sand veins. Most of the farms have lands of the two former kinds; a few, and unfortunately a very few, have a share of the latter.

These soils being totally different in their nature, require, and, when in good hands, generally have, a totally different management; but as they usually ad-
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join to each other, and the transition is seldom sudden, but gradual, that management is frequently, and in particular seasons sometimes unavoidably, blended; and thence comes the opinion entertained of the best Wiltshire farmers, that they have no regular system of cropping.

Course of Cropping the White Land.

The white land being more adapted to a wheat than any other crop, is frequently divided into only three shifts, so as to bring round the wheat crop as often as possible. The common course is, 1. Wheat; 2. Barley, or oats; 3. Clover, part fed, part mown, and then raftered for wheat. This is, in fact, nothing but the old common-field husbandry, and the most exhausting of any that can be devised.

Many farmers have therefore, by way of amending this system, omitted to sow grass-seeds with their barley or oats in half their second field, and have winter-fallowed that part, and have sown it the third year with pease, beans, or vetches, as fallow crops preparatory to wheat (this kind of land being in general too heavy and wet for turnips); and in the next round, the same system has been adopted in the other half of the field.

This seems to be the best three-field system, for land of this description. But there are many parts of the white land that will not produce stout crops of wheat, under any three-field husbandry; they are therefore usually sown by the best farmers in a four-field course, viz. 1. Wheat; 2. Barley or oats, with seeds; 3. Clover, mown or fed, and a winter-fallow; 4. Summer-fallow on the foulest part of the land, and pease, beans, or vetches, on the rest.

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This course of sowing keeps the land in heart, and ensures good crops of wheat, and, in general, it is not apt to make the land tired of clover; but if it do, the clover is shifted (in the manner mentioned under the *three-field husbandry*), so as to come round only once in eight years.

The Flinty Loams.—The flinty loams being the depending land for barley, and generally kept in a course to ensure that crop as good as possible, the best farmers work this land in a five-field system, as in the sand veins: 1. Wheat; 2. Turnips; 3. Barley, with seeds; 4. Clover, mown, and broken up in the following winter; 5. Summer field, in preparation for wheat, with a winter fallow.

The Sand Lands.—The sand land, which is undoubtedly the most useful land in the district, is peculiarly so when annexed to a Down farm, as a depending soil to raise green winter food for sheep.

A Down farm that has sand, land, and water-meadows, never is, or at least never ought to be, without green food for the sheep stock, at any time of the year.

This soil is peculiarly adapted to turnip husbandry, and is usually applied to it; but in a variety of modes, according to the variation of the quality of the soil, or to the opinion of the occupier.

On the poorer or more gravelly parts of the sands, particularly about Zeals, Stourton, &c. the common, or Norfolk course of turnip husbandry, has frequently been tried: 1. Wheat; 2. Turnips, fed off in winter or spring; 3. Barley, with seeds; 4. Clover, mowed or fed, and then wheat on one earth. But many families have given up this course, under an idea that it was exhaust-

exhausting, and wore out the "staple of land," already too weak in itself; and although they got good crops of wheat so long as the land would produce good crops of clover, yet of late, since the clovers have failed, the wheat crop succeeding them has also failed, or at least has been very weak and "*knee-sick*;" and as a weak crop of wheat is always accompanied with a strong crop of weeds, the land could not be got sufficiently clean for a turnip crop, and was therefore foul during the whole round.

To remedy this, they have adopted the following course: 1. Wheat; 2. Barley, with seeds; 3. Clover; 4. Turnips, to be fed off in October, November, and sometimes as late as December, and then wheat again.

And notwithstanding, in this course, the turnips are eaten off at a time when they are least wanted, and no provision is made for green winter food to winter the lambs at home, this system seems to be the most general on sands of this description throughout the district; and as sowing late is advisable with wheat in these sands, the error in this course of husbandry is not so great as would at first be imagined. But those who have seen this error in its true light, have adopted a five-field system on this kind of land: 1. Wheat; 2. Turnips; 3. Barley and seeds; 4. Clover; 5. Fallow, ploughed early, and folded as close as possible, preparatory to wheat.

This alteration has been found to produce clean strong crops of wheat; and if means can be found to keep the land from being tired of clover, or if any substitute can be adopted for it, so as to sow it less frequently, this may be called the most complete system for the sand land of this description.

In deep sands and sandy loams, which, particularly
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in the Pewsey Vale, are so stiff as to be called clays, the lands on the severalty farms are frequently sown with wheat, alternately with beans, pease, vetches, turnips, or clover; but the most general mode of husbandry is a three-field course, viz. 1. Wheat; 2. Half with beans, pease, or turnips, followed with vetches; half with barley or oats, with seeds, followed by clover, mown: the clover part is shifted every round, so as to bring the land under clover only once in six years.

This system of sowing, and which the land will well support, plainly denotes this soil to be the most valuable in the district; and yet much of it still lies in a common-field state, and in many instances is at present of little value.

The severalty down lands which are in a state of tillage, are sown according to the strength of the land: some that is of a good deep red soil, and has been chalked, will bear a four-field system, viz. wheat, barley, and two years in grass; but the black land, in general, will seldom bear wheat after the first round of crops. When it has rested some years, it is usually broken up, and sown with oats, then with rape, then with oats and ray-grass; it then lies for some years, till it is supposed capable of bearing another like course of crops.

But with the best farmers of the district, turnips are introduced on the hills pretty generally between the wheat and oats; or they will sow rape or turnips with ray-grass after the wheat, to be fed off together in the winter, and remain in grass.

There is seldom any regular system of cropping these light hill lands; but they are, according to the judgment of the occupiers, kept in such course as will best assist their sheep stock, and taking only occasional crops of corn.

SECT. IV.—WHEAT.

SOUTH Wiltshire farmers have no great quantity of yard or pot dung. The land near home being generally the coldest and stiffest, usually gets most of the yard-dung. It is thrown over the field, and immediately ploughed or raftered in ; or if the dung be light and not rotten, the sheep are folded upon it previous to the ploughing.

In their distant lands, the farmers depend solely on the sheep-fold for manure. They fold as close as possible to the sowing, waiting day by day for the fold to keep pace with them ; and in very dry seasons they fold again after the wheat is sown.

Seed.—The farmers of this district are very particular in changing their seed, not only from a different soil, but if possible, from a distant country, under an idea, which experience proves to be well founded, that Nature delights in a change ; and they never omit to steep their wheat in brine, and to lime it.

The red wheat is usually sown. The quantity of seed per acre varies considerably in this district, according to soil and season, but, generally speaking, the Wiltshire farmers sow very thick. In broad-cast husbandry four bushels (Winchester) are frequently sown per acre ; and seldom so little as two and an half.

Seed-time and Harvest.—The seed-time for wheat, necessarily varies in the different soils of this district.

A certain quantity of rain is necessary for the down land : they generally begin to sow it immediately after the first rains in September ; but a second rain would

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be more desirable, allowing some short time to elapse between these rains, for the land to *purge itself* of the weeds then lying dormant in it.

It was customary formerly to sow this land much earlier; but now they find it better to let it lie, and get as close as possible before sowing, which prevents the wheat from being *winter proud*, and sometimes from being eaten up by the grub or wire-worm.

The white land is next sown, then the flinty loams, and last of all, the sand land. On this latter soil it is not uncommon to sow wheat as late as Christmas, especially if it succeed a turnip crop, which, though perhaps not strictly reconcileable with the rules of good husbandry, is a mode frequently practised on the sand lands of this district.

Spring wheat has latterly been introduced in these sands, which, if the land be in good heart, is generally very productive.

Wheat Harvest.—The wheat harvest is usually as early in the Wiltshire Downs as in most parts of the kingdom, and as the corn is seldom full of weeds, it is generally carried in three or four days after it is cut, sometimes it is carried immediately from the hook; but of late years it has been a common practice to cut the wheat before it is quite ripe, especially if there be any appearance of blight upon the straw. In that case, they lay it down *in gripe* (as it is provincially called), with the ears hanging into the furrow, so as to receive as much of the dews as possible, and turn it for two or three days before they bind it in sheaf. This is found to improve the grain* both in quality and size.

* This is provincially called "*the berry*."

The general custom of the district is to set up the sheaves in double rows (usually ten sheaves*) together, for the convenience of the tithing-man, and the sheaves so set up are called an *aille*, or shock of corn. The wheat is usually cut very high, and they prefer ploughing in the stubble to mowing it for litter, as is the case in counties where straw is scarce.

The wheat of this district is generally hand reaped.

SECT. V.—BARLEY.

BARLEY is the favourite crop of a great part of this district. The climate, and a considerable portion of the soil (the flinty loams) are particularly favourable to the growth and quality of this grain, and the water-meadow and sheep-fold system are well adapted to its cultivation.

But although the flinty loams, particularly with the assistance of the sheep-fold, are the only lands fit for the culture of barley, yet such is the force of custom and imitation, that it is not uncommon to see the strongest argillaceous, or chalky loams, under the same crop and the same kind of management, whereby, in case of a wet seed-time, the crop scarcely reproduces its seed, and the grass-seeds sown with it totally fail. This circumstance frequently occurs; it happened particularly in the year 1792. Wherever, therefore, arable lands have been laid in severalty, a barley crop has been almost totally excluded from the strong heavy loams, as may be observed in many parts of the Pewsey Vale.

* Provincially, a "*tithing*."

Preparation.—The general preparations for barley are a winter fallow, and at least three ploughings, provided the lands are in severalty, and not subject to common-field customs.

Manure.—The great dependence for the barley crop in the common-field system, is the sheep-fold.

After the wheat is sown, the fold is sometimes, and very properly, put upon the down land, but more usually upon the wheat stubble which is to be prepared for barley; but the manure from the fold is not considered of any great value until the ewes and lambs begin to feed on the water-meadows; it then becomes almost *invaluable*. The manure of ewes is reckoned much better than that of wethers, on account of the great quantity of urine which they make.

Five hundred ewes, with their lambs, will fold a tenantry acre well in one night; and none but those who have seen this kind of husbandry can form a just idea of the value of the fold of a flock of ewes and lambs coming immediately on the fallow land with their bellies full of quick young grass, from a good water-meadow, and particularly how much it will increase the quantity of the barley crop. The increase may be fairly stated at a quarter of barley per acre.

The circumstance that the flinty loams abound most in those parts where the county is flattest, and the rivers widest, is peculiarly fortunate, as the water-meadows are of course most numerous in those situations, and consequently the barley land and its manure lie contiguous, as is the case in the vicinity of Sarum.

In severalty farms the sheep-fold is put at this season on the land in course for turnips, and as barley comes
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next in due succession, both crops are hereby duly secured.

Seed-time.—Barley is sown later in Wiltshire than in most counties. There is a certain degree of coldness in the land, which prevents the fallows from working so early as they do in Hertfordshire and many other counties; and as the barley crop depends so much upon the water-meads, the time of sowing is regulated by the growth of the water-mead grass, so as to begin when the spring feeding of the water-meads commences, and to finish by the time they are eaten off. This time on an average may be stated from the 15th of March to the 25th of April.

The Wiltshire proverb is, “that barley will do if it have a *May dew*,” and this opinion is frequently carried so far as materially to injure the crop, by sowing too late. The quantity of seed sown is sometimes six bushels, and seldom so little as five. Many farmers make a practice of soaking their barley previous to sowing, and all are particular about changing their seed. The barley crop is almost uniformly mown in this district. It is seldom strong enough in the straw to require binding in sheaves, it is therefore forked from the swath into cocks or pooks, and the ground is raked by hand.

SECT. VI.—OATS.

OATS are not much cultivated in this district. It is a question, whether the district does not consume more than it grows. Barley being the favourite crop, oats are seldom sown in large quantities, except in such

soils and situations as are not applicable to barley, particularly in the black light soil of the new broke downs: even in a regular tenantry oat field, the farmers consider the cultivation of them to be bad husbandry, and will therefore frequently forego the crop to give an additional year's rest to their wheat lays.

This is, however, in a great measure to avoid a third crop of corn successively. But the white lands of the district are best calculated to bear good crops of oats; they are too heavy for turnips, and barley never does well in them.

General Produce of Crops.—The crops of corn are not so great per acre, in this district, as in many other parts of the kingdom. A good medium crop may fairly be taken at the following number of Winchester bushels per acre, including the tithe, viz. wheat 22 bushels; barley 28 bushels; oats 36 bushels. But in the severalty farms, where the land comes less frequently to corn, the advantage from the turnip system has been to the amount of one-fourth more in the produce, and in lands applicable to it. Barley might here be rated at full one-third more than stated above.

SECT. VII.—PEASE AND BEANS,

ARE seldom sown in large quantities in the common fields; the few that are sown in the hook-land fields are scarcely worth mentioning, were it not to remark, that they are cultivated in a slovenly manner; nor can it under such a system be otherwise. Wherever the division of common fields has taken place, it has tended to
increase

increase the cultivation of beans and pease, in the same proportion as it has decreased the culture of barley in lands better calculated for the former than the latter.

SECT. VIII.—RYE.

RYE is often sown for spring food, but is seldom suffered to stand for a crop. The usual time for sowing it, viz. in the month of August, makes it peculiarly proper to supply the failure of a crop of turnips; and on the Down lands, it is not uncommon to harrow in some seed among a thin crop of turnips, and to feed them off together in the spring. But the introduction of Swedish turnips has lessened the cultivation of rye for sheep-feed.

SECT. IX.—RAPE.

RAPE, or coleseed, is much cultivated on the Downs, particularly on those parts that are unfit for barley or turnips. It is considered a very nutritive milky food for ewes; but it is supposed to exhaust the land, if it be not fed off early. When under proper management, it is certainly a very valuable green winter food, and particularly in this district, as it will grow on those soils where neither turnips, sainfoin, vetches, clover, nor even, in some instances, ray-grass will grow, viz. on the strong, cold, wood-sour land, and in the black loose soil of the Downs.

SECT. X.—VETCHES.

THE winter and the summer vetch are both sown in this district, but they do not thrive on the strong, wood-sour land, nor on the loose black soil of the Downs: in such situations they are apt to be injured by mildew. They are cultivated as a preparation for wheat; on the strong loams they are frequently sown, to cut as green meat for horses, and still oftener as a green crop for the weaning of lambs.

The winter vetches are sown early enough in the autumn, to be sufficiently high to cover the ground before winter, and it is customary to "mudel them over" with loose strawy dung, to preserve them from the frost. They are of great service to the stock about Midsummer, by which time the ray-grass is either eaten or gone off. The winter vetches then serve the sheep till the spring vetches come in, when the land is broken up for wheat.

The spring vetches are sown in a part of the "*old field*," that lies in course for wheat in the ensuing autumn, and are in general *eaten off*. They are sown at different times in the spring months, and consequently there is a succession of crops during the summer: these keep the sheep on until the turnips are ready for them.

SECT. XI.—TURNIPS.

THE flinty loams, which we have already mentioned as being peculiarly proper for the cultivation of barley, are by the same rule equally applicable to the turnip

nip system; but it happens that these soils generally lie near water-meads, where turnips are not absolutely indispensable for spring food, the water-mead grass being not only a good, but a *certain* provision for sheep. But since the attention shewn to improvements in the breed of sheep, the consequent advantages arising from the care of valuable stock, have been more generally known and felt than formerly. A desire to have this stock continually under the farmer's own eye, has induced the tenants of this district to attempt the winter keep of the whole of their flocks at home; and as by the feeding off a crop of turnips, the best manure is without any expense provided for the barley crop, turnips now make pretty generally one field in the system.

Where water-meadow grass cannot be obtained, Swedish turnips have been found an excellent substitute for spring food: they are generally sown after wheat, and if they escape the fly, are considered pretty safe for a crop; they are proof against all frost, and will last till May.

It has been objected, that they break the mouths of old sheep and lambs; and to prevent this, I have known the turnips drawn early in the spring, and lain in the ground. They thus become mellow, and are even better for lambs than water-meadows.

They are here, as in many other districts, often eaten too early in the year. It cannot be too strongly impressed on landholders, that the great excellence of this root is its being an admirable food for all kinds of stock; when scarcely any other kind of food can be obtained for them.

In the white lands turnips are sown, and frequently produce great crops; but the land being too heavy for the lambs, they are commonly drawn, and eaten on a firmer

firmer soil. It is a good practice to draw turnips on all soils, but difficult to persuade the shepherds to do so. A cross-blade instrument is used to strike the root (when out of ground) into four pieces at one blow, and thus the teeth of sheep are saved from injury. Long dung from the stable, here called *muckle*, is the preferable manure for turnips; the rotten dung, or *pot dung*, with the sheep-fold, for wheat.

SECT. XII.—POTATOES.

POTATOES have been much cultivated of late years in almost every part of the district, but particularly on the sand lands. The general introduction of this valuable root has been of essential service to the labouring poor, of whose sustenance it now makes a very considerable part, especially in a season when wheat is dear.

A remark has often been made in this district, as to the peculiar aptitude of potatoes to supply the want of wheat, viz. “that a bad season for wheat, is generally a good one for potatoes:” this remark, though, like other general observations, it may be subject to exceptions, is certainly founded in reason.

Bad crops of wheat are generally occasioned by very hard winters, or wet summers: in the former case, the mischief is known soon enough to increase the potato planting; in the latter case, the wetness of a summer is very favourable to a potatoe crop.

The reverse does not always hold good: a favourable rain immediately after a good wheat harvest (as in 1793), may save a failing crop of potatoes, and then both crops may be good.

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The mode of preserving potatoes during winter in this district, is very simple, being in general left in the fields, covered up in long narrow ridges of earth (provincially "*pits*"), with an intermediate covering of dry straw; and this is found to preserve them (in case they are perfectly dry when pitted), during the severest winter frosts, as well as if kept in houses.

Attempts have been lately made, and with apparent success, to introduce potatoes as a crop in a regular system of husbandry, on the sand lands of this district. Among the small farmers on that kind of land who do not keep flocks of sheep, it turns to a very good account, particularly in the neighbourhood of Warminster, Lavington, &c.: their course is, 1. Wheat; 2. Barley; 3. Clover, mown and winter-fallowed; 4. Potatoes, and then wheat again.

And as this kind of land does not require early sowing for wheat, the potatoes are got off in proper time for it. They manure with the pot dung for potatoes, which serves for the other succeeding crops. The remark of the potatoe farmers is, that "they do better after clover than after wheat:" if so, their course of husbandry is right. It is undoubtedly a profitable one; particularly near great towns, where manure is easily bought, and potatoes easily sold.

The quantity planted on an acre is usually from four and a half to six sacks; the produce from 50 sacks to 160, but 100 is reckoned a good crop: the sack contains 36 gallons, and weighs full 200 cwt.

Several attempts have been made to apply potatoes as a winter food for cattle; they have been tried in all ways—raw, boiled, and steamed; and upon all kinds of cattle, viz. "pigs, sheep, oxen, and horses:" there

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is not a doubt of their nutritive quality. The only question is, whether they can be raised cheap enough to answer the purpose? Parsnips are a better food for cattle.

SECT. XIII.—ARTIFICIAL GRASSES.

THE kinds of “artificial grasses” that are usually sown in this district are, broad clover on the lowlands, about 15 lbs. to an acre; ray-grass, with an intermixture of hop clover, otherwise called trefoil or nonsuch (on the high lands), three bushels, mixed, to an acre. But in those fields where broad clover has been repeatedly sown every third or fourth year, the farmers begin to complain that the land is tired of it; and they therefore frequently change their grasses, and sow hop clover and ray instead of it; a mixture also of marl-grass, or Dutch clover, is occasionally added, which last has been found to answer very well in lands tired of broad clover, especially for feed. In fact, many of the tenantry fields are so worried out by repeated crops, that they are become tired of corn as well as of clover.

Sainfoin.—Many of the high lands are proper for sainfoin; and though there are some of which the soil is too loose and light, there are many others which might be sown with it to great advantage, and so rested from corn for some years, as is done in the neighbouring county of Hants; but as this is not practicable in common-field husbandry, that valuable grass is as yet but very little cultivated in this district. The seed
sown

sown is about six bushels to an acre. Perhaps one reason why the cultivation of sainfoin has been so little attended to in this district, is, that it is not so much wanted for autumn food, as in counties where they have no sheep downs.

The great object of sowing artificial grass in South Wiltshire, is, to have a plenty of spring feed for the sheep, from the time the water-meadows are fed off till the time the sheep go to down; and on this account, ray-grass may be called the depending artificial grass of this district. This grass is less subject to fail than clover, and makes an earlier spring feed, especially in high and exposed situations; and being of an exceeding nutritive nature, is very proper for ewes and lambs.

But it is generally remarked, that the quality of ray-grass has of late very much degenerated. The original kind produces a white stalk and a white seed, and is a perennial grass; the degenerate kind has a purple stalk and a blackish seed, and is almost become an annual.

According to the Wiltshire phrase, "it turns to couch:" in other words, it soon dies out of the land, and the couch-grass supplies its place. The restoration of this grass to its original purity, by a particular attention to the varieties of it, and a careful selection of the seed, is an object of great consequence. Repeated sowings of the same seed in the same land, have undoubtedly contributed to this degeneracy. Purchasing the purest seed that can be procured from other soils and climates, may contribute to restore it to its original purity.

Mr. Peacey, of North Leach, in Gloucestershire, about 20 years ago, selected seed from pure perennial ray-grass, which has since gone by his name, and is pecu-

peculiarly useful in sheep-breeding countries, as it springs at least a fortnight earlier than the common sorts.

This grass is valuable, when young, both for food and hay ; but should not be left to get old. Two bushels are sufficient to sow an acre, and it will stand from seven to ten years.

CHAP. VIII.

GRASS LAND.

SECT. I.—MEADOWS.

THE vallies in this district are so narrow, that there is very little meadow land, or soil convertible thereto, except immediately adjoining the bourns and rivers; and as such land is almost invariably converted into water-meadows, it is considered proper to omit the description here, and to treat more fully on the subject, under the article "Irrigation," Chap. XII. Sect. 4.

There are some cold clay soils used as dairy land in South Wilts, viz. from Sedgehill and Semley to Wardour Castle, adjoining Dorsetshire, and from Dilton's Marsh, by Westbury and Steeple Ashton, towards Lavington and Pottern, being the south boundary of the north-west district. But as the dairy system of the county is the peculiar branch of agriculture in North Wilts, their partial veins of grass land are not thought of sufficient consequence to be described as the pastures of a county.

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SECT. II.—PASTURES.

THERE are also here, as in other counties, a few pasture lands near the towns ; but as these are in the hands of the inhabitants of towns, for convenience, the management of them makes no part of the agriculture of the district.

The custom of sowing lands with natural permanent grasses, is very little used or known in South Wiltshire.

Natural Herbage of the Downs.—The Wiltshire Downs produce not only almost every kind of natural grass, but also various kinds of plants ; and the sweetness of the feed depends much more on its being kept close, and eaten as fast as it shoots, than on any particular good quality of the grass itself ; for there are many downs, which, when they are closely fed, appear to be very sweet, but which, if suffered to run a year or two without a full stock on them, will become so coarse and sour, that sheep would almost as soon starve as eat the grass they produce. Even on those parts of the Downs, where the finer and sweeter grasses abound, the soil is frequently so loose and porous, that nothing but close and constant treading will prevent them from dying away, or being choaked by the larger and coarser grasses.

Sheep wells and sheep ponds are mentioned in Chap. III. Sect. 3, as being, together with the buildings of the farm, under the joint care of landlord and tenant.

SECT. III.—HAY-HARVEST.

THE hay harvest of South Wiltshire employs, comparatively speaking, but few hands. It certainly is not thought of so much consequence as it should be; quantity instead of quality, is too frequently the object.

If the resident labourers with their families be not sufficient to make the hay in proper season, it is in many cases deferred till they are; "what is wanting in strength, is too often made up in time." The consequence is, that neither the quality of the hay, nor the neatness of the ricks, is much attended to. In the management of the corn-harvest, the South Wiltshire farmers certainly excel, but in hay-making they are in many instances very slovenly and remiss.

CHAP. IX.

GARDENS AND ORCHARDS.

SECT. I.—GARDENS.

THE gardens in this district are, for the most part, convenient to the cottages, consisting of from 20 to 40 perches each, and having frequently a few apple-trees in them. The rent of a cottage and garden usually about 2*l.* 10*s.*; seldom so high as 4*l.*

But in the sandy veins, much land is applied to the produce of esculent vegetables. Near Devizes, Lavington, Warminster, Westbury, &c. many families subsist by this kind of husbandry, occupying from two to five acres each as garden ground. The produce supplies the adjacent towns in the district, and Frome and Bath, in the county of Somerset, with cabbage plants, pease, beans, carrots, turnips, and vast quantities of potatoes. The occupiers are in general industrious, both in themselves and families, and give from 6*d.* to 2*s.* per perch rent for their lands.

SECT. II.—ORCHARDS.

APPLE-TREES are to be met with in almost all the parishes; but orchards are little known in this district: the situation of the villages is in general too much exposed, and the soil not sufficiently loamy, for the growth

growth of them. In some retired villages, and near the towns, orchards are raised with much attention, and very good cider is made there. The principal uses of apples are, however, puddings for the children of cottagers, and table fruit for the other classes of society. Indeed the great predilection of the country is so strong for drinking beer, that the want of cider is little felt in the district.

CHAP. X.

WOODS AND PLANTATIONS.

THIS subject naturally divides itself into two branches: 1st, Underwood, or coppice-wood; 2d, Timber.

SECT. I.—UNDERWOOD.

THE county of Wilts was formerly well wooded; and till within the memory of man, wood made the principal part of the fuel in the farm-houses and the villages.

The general introduction of pit-coal, which the farmers are enabled to bring at a trifling expense of carriage by their return waggons from market, has very much lessened the consumption of wood for fuel. On this account too, little attention was at one time paid to its preservation, especially on the Downs and near the centre of the country, where it is most wanted. Many parts of the outskirts of the county abound with large and valuable woods, which are in general very thriving, though great injury is done to many of them, by their being subject to common-rights for cattle, and in some instances for deer. Enclosure acts, and agreements for divisions of commonable lands, will in time get rid of these incumbrances; but many improvements of this kind have hitherto been neglected, under an idea that cattle do very little injury to woods after they are seven years old, the usual time at which they begin to
be

be commonable. If the owners of such woods saw this injury in its proper light, they would not hesitate to make ample compensation to the commoners, to induce them to abandon their rights of pasturage therein.

The stools which produce underwood and coppice-wood, may be defined under-ground pollard trees. Like other pollard trees, they have their youth, their perfection, and their decay. In the first and last states they are particularly susceptible of injury; and though in strong thriving woods cattle may do but little harm to the underwood after it is seven years old, yet in weak decaying woods, the shoots are not strong enough to get out of their reach by that period; and the wood, by being constantly cropped off, will in a very few years decay and die: and while woods are in a state of commonage, all young plants which may spring up spontaneously, will be liable to injury, and few of them will come to perfection.

As different kinds of underwood are in great request in this county for various purposes in husbandry, the preservation of it becomes an object of consequence, especially since the late great advance in the price of coals both at Newcastle and in Somersetshire, which has again made it worth while to raise wood for fuel. In that respect, the centre of the county finds a serious want of wood, and those who have land proper for it, would receive great profit by converting it into coppice.

There are many situations in the county particularly favourable to the growth of wood, but none more so than the peaty edges of the sand vein about Manningford, and other parts of the Pewsey Vale. No part of Wiltshire is more in need of wood. There is no part where it would grow faster, or yield more when grown,

and there is no other use to which the land can be applied so advantageously.

It behoves those who are in possession of old well planted woods to keep them from decay ; and if their woods have suffered by age or neglect, to do their endeavours to restore them ; for notwithstanding the present almost general use of pit-coal has considerably diminished the consumption of wood and charcoal for domestic purposes, the demand is still so very great for underwood, that woods will not only produce sufficient to pay the rent of the land on which they grow, but if in good situations, and well managed, will produce at least half another rent by the timber which may be raised in them, without any material injury to the underwood. It is a well known fact, that woods are the best and most natural nurseries for timber, particularly for oak and ash, and that the underwood contributes greatly by its shelter and protection to the growth of trees ; but it has never yet been sufficiently considered, that it is almost incompatible with the present improved state of agriculture and management of fences, to raise trees (except elms) to any great size in hedge-rows, because the impoverishment of the soil by the roots, and the injury to the crops and fences by the dropping and shade of the tops, more than counterbalance the advantage to be gained by the growth of timber. The great demand for underwood in the county is for the following purposes :

Ash Poles.—For sheep-cribs, rind-hoops for barrels, and for rigging of ships, spade-handles, rake-stems, pick-stems, and other implements of husbandry ; coach-makers, chair-makers, wheelwrights, and carpenters' uses, &c. &c.

Hazel.

Hazel.—Sheep hurdles, spars for thatching, ~~pease~~ and bean sticks, dead hedges, &c.

Alder, Willow, Birch, &c.—Poles for rafters, patens, clogs, shoe-heels, turners'-ware, coal-pit uses (sent to the Mendip pits in Somersetshire), rails for fencing, chair-makers' uses, &c.

Oak.—For rough domestic uses, and bark for tanning.

General Uses of all.—Faggots, particularly for fuel in farm-houses, and for baking; bavins for lighting fires in towns; thorns and refuse for dead hedges, and particularly charcoal for those manufactories to which pit-coal is not applicable, as well as for stoves in kitchens, &c.

To recover Decayed Woods.—If it be profitable to plant new woods, it is certainly much more profitable to protect those that are already planted, to fill them up where thin, and to restore them when in a state of decay. The expense is not only lessened by the saving of new fences, but the profit is greatly increased by the rapid growth of the wood when planted in situations that are sheltered by other wood already planted. In those woods where saplings spring up in great numbers spontaneously, their growth should by all means be encouraged. At the time of cutting the underwood these saplings will perhaps be 14 or 15 years old; and it might appear proper, after leaving for timber trees such as are straight and handsome, to cut off the rest for underwood. But great part of the saplings so cut off

at that age, will not be large enough to produce shoots sufficiently strong to get up as fast as the other underwood ; these shoots would therefore suffer, and the stock would never come to perfection. It is, therefore, more advisable not to cut off such saplings as are intended for underwood, until the *second* cutting of the wood, when (being perhaps near 30 years old) they will throw out shoots strong enough to force their way, and keep pace with the surrounding underwood. Where saplings do not spring up in abundance spontaneously, young trees must be planted, part of which may be preserved for timber, and the remainder left to be stubbed off for underwood.

Kinds of Wood to be planted.—The kinds of wood to be planted in coppices, either in making new ones or filling up old ones, must be regulated partly by the demands of the country, but chiefly by the peculiar aptitude of the soil and situation to produce particular sorts. Let Nature be your guide in planting, and you will seldom do wrong. Particular soils and situations will always favour particular kinds of trees: we need not look for the reason, but for the fact. The chalk hills of Hampshire are peculiarly proper for beech, the flinty loams and clays of the same county for oak and ash ; the mossy steep sides of the Wiltshire Downs for hazel, and the sands of the same county for ash ; the rugged and almost naked rocks of Mendip in Somersetshire, near Cheddar, produce the lime-tree and the walnut in the greatest luxuriance ; and on the highest parts of the same Mendip hills, where no other trees can stand the sea-breeze, sycamore flourishes as well as in the most fertile valley.

The

The periods of cutting underwood must be regulated by the luxuriance of its growth, and by the demand of the country, and the uses to which the wood is to be applied when cut ; but, *in general terms*, the common rule of trade will hold good here, viz. that "small gains and quick returns will make the dealer rich, but long credit ruins him."

In the article of underwood, not only the interest of money, but the loss of the succeeding growth, tell against the value of standing wood after it is fit to cut, and make it doubly the advantage of the owner to cut his underwood as early as it is saleable.

Time of cutting Woods.—There are many opinions respecting the most proper time of the year for cutting underwood, but there is one rule, which on the seller's part is without exception, viz. that the older the wood is, the later in the spring it should be cut. When old wood is cut early in the winter, and a hard winter follows, the damage done to the stock is very great. Young flourishing wood will bear cutting at any time; but on the part of the buyer, it is allowed that all woods are more durable when cut in the most stagnant state of the sap, and in all uses where bending is required, such as hurdles, hoops, and even dead hedges, the wood cannot be cut too early in the winter, being, if cut when the sap is rising, brittle, and unfit for those purposes. Oak underwood will, at the present price of bark, pay well for standing till the sap is up for barking it, and it seldom happens that the stocks are injured by cutting it so late in the year.

SECT. II.—TIMBER.

THE sorts of timber natural to the county may be almost reduced to three—oak, ash, and elm.

The cold soils on the west side of Wiltshire are peculiarly favourable to oak ; the sands of the south part to ash ; and the gravelly vallies and deep loams of various parts of it, to elm ; and although many parts of the county appear to be bare of timber, yet there are so many other parts where the soil is peculiarly adapted to its growth, that the produce of the county is fully equal to its consumption.

Beech timber is not common in the county ; and although it grows so very plentifully in the adjoining county of Hants, there is none grows spontaneously in Wiltshire, except on the very edge of the county towards Hampshire.

Elm timber will always be abundant wherever the soil is favourable to it, as it makes a good shelter ; its shade docs little harm to the hedges, and its leaves and roots none to the land. But oak and ash timber being undoubtedly injurious to the tenant, require the fostering hand of the landlord to protect them ; the former being hurtful to the fences by its shade, and the latter being particularly injurious by its roots to the arable farmer, and by its leaves to the dairy farmer, ash leaves communicating an incurable bad taste to the butter, during the time of their dropping in autumn ; and to this cause it is owing that ash timber, though so very necessary for implements of husbandry to the corn farmers, and for utensils to the dairy farmers, is nevertheless getting scarce in the county, and if it cannot be propagated in hedge-rows, should be encouraged as much as possible in woods.

Spirit

Spirit of Planting.—But in speaking of the state of the woods of this county, it must not be omitted to remark, the amazing spirit of planting that has for some years past been diffused through every part of it. It is certainly owing to the residence of so many noblemen and great land-owners in this county, that the spirit of improvement is so general; and while it is difficult to name one gentleman that has not contributed something, in proportion to the extent of his land, towards ornamenting the county by plantations, it would be invidious to point out any particular person as a great planter: a list of the names of the resident nobility and gentry in the county of Wilts, would be a pretty accurate list of its planters. And to this attention to the beauty as well as the uses of timber it is owing, that there are few parts of the kingdom where the timber trees, particularly the elms in hedge-rows, are better preserved, and less damage done to them by trimming up the side branches, than in the county of Wilts.

As an instance of the possibility of a very great produce from a small quantity of land, I shall here state the result of an accurate estimate of one acre of timber, in the grove at Longleat, the seat of the Marquis of Bath, measured and valued standing in April 1810. On the declivity of this wood, nearly opposite the house, I measured out an acre of land, 16 perches by 10, and found thereon,

9 oak trees, measuring	-	-	2952 feet, or 73 tons 32 feet.
29 chesnuts and abeles,	-	-	3182 79 22
22 small trees of various kinds,	-	-	280 7 0
60 trees.	Amount,	-	6414 feet, or 160 tons 14 feet.

Being full one ton of timber to a perch of land.

N. B.

N. B. Some part of this timber is very old, and probably decayed ; but if the whole were sound, the aggregate value thereof at this time would be upwards of 1500*l*. Perhaps I could not find in this grove another acre with so many large trees ; but I believe there are several single acres of equal value with the above.

Kinds of Trees proper to Plant.—As to the kinds of trees proper for planting, little need be said. The soil, the situation, and the aptitude of the country for producing any particular kind of trees or underwood, will point out the kinds which are fittest for the country. Nature shews us what she likes best in every situation, in every country ; and if we follow her dictates, we shall seldom err.

The principal object of a planter's attention is, to consider what kinds of wood grow best in the poorest land ; and if he can find that land worth only 2*s*. 6*d*. per acre can be made as productive as that worth 20*s*., he will prefer planting the former : he thereby not only improves those parts of his estate which could be improved in no other way, but ornaments and shelters the rest.

If he choose to adorn his lowest and best meadows, by planting elms, limes, chesnuts, or other ornamental trees, he will do well ; but no man of sense (to say nothing of taste) would cover a rich meadow with Scotch firs, while he has land on the hills, of not one-tenth value, that will produce them equally well.

Age and Condition of Young Trees fit for Planting.—Mr. Miller (who has been justly styled the father of English gardening) was of opinion, that young trees should be raised on good land ; and that it was necessary

sary they should carry a stock of health and strength with them from the nursery, to enable them to live on poor land. Some years since, a contrary opinion prevailed; and it has been argued, that all nurseries should be made on land similar to that proposed to be planted. Fortunately, that opinion is now generally exploded. It has been proved, that a plant once weak, is for a long time, if not always, weak. A breeder of cattle would be laughed at, if he attempted to make large handsome animals by starving them the first year; and the analogy holds good between the animal and vegetable creation. Trees raised on poor land are small and weak in their infancy, and would continue so for years, if not removed from the nursery; and if removed weak, unless it were into much better land, they would never be otherwise. No tree can thrive without its due proportion of roots. A plant raised in poor land has never that proportion, and transplanting it into similar land is not likely to increase it; whereas the same plant, if raised in strong land, would have twice as much root; and when transplanted, those roots will be able to find nourishment even from poor land, because they have more mouths to collect it. Let those who doubt this, view the Marquis of Bath's nursery at Longleat, and then view the condition of his trees, and the soil on which they are planted. The former is a stiff loamy clay, worth 25s. per acre; and great part of the latter was a barren gravel, which produced nothing but heath, and was not worth 2s. 6d. per acre.

Rules for Planting, whether Sowing or Transplanting be preferable.—It has been argued, that trees should not be transplanted at all, but raised from seed on the land where they are intended to remain. In

answer

answer to this, if it be allowed that trees raised in a poor nursery are weak, they will always be so, if sown where they are to remain; and as they will require to be kept clean from weeds for many years, until able to keep them down themselves, that expense will be a serious one: after all, they will not make strong healthy trees. But it is argued, that some trees should not be transplanted at all, particularly oaks. This I deny. I will allow that the tap-root of an oak is given to enable it to take deep hold in the land, and that it seldom makes sufficient lateral roots to keep the tree steady, when transplanted into an exposed situation: that would certainly be the case, if oaks, 12 or 14 feet high, were dug up in a thick wood, and planted in an exposed situation; but such is not the right way of transplanting an oak. Let the acorns be planted in a nursery, in good land; let them be removed at three or four years old, and the tap-root cut off; let the plant also be cut down at the same time, to within two or three inches of the crown of the root; and when it shoots the next spring, cut off all except one principal shoot, which may be trained to a tree, and removed with equal safety with any other kind of tree: and an oak so cut off will be bigger and taller at seven years old, than one uncut will be at ten. But whether transplanted or sown from the acorn, oak is not a proper tree to be planted single, unless in countries particularly favourable to its growth, as many of the poor heaths in Hampshire are; but even there, they thrive best where they are most sheltered. As to the propriety of transplanting every other kind of tree, it will not bear an argument.

At what Age Trees should be Transplanted.—When trees are raised in a nursery, the nurseryman's object is to

to make the most of his land. He sows his seeds in drills or in beds, and as soon as they begin to crowd each other, he transplants them to greater distances; and again, when they begin to crowd, he disposes of them. If they are suffered to stand to draw each other up, they receive material injury; they should therefore be removed before that period. Firs usually stand two years in the seed-bed, and two years in the transplanted bed: a third shoot *is fatal*. In forest trees it is not so material; they will not crowd each other under three or four years after transplanting; and if they are to be cut off at transplanting for underwood, they will be the better for standing so long. Beeches, and such trees as will not bear a knife, may be transplanted earlier. The grand rule is, to give every tree as much strength as possible while in the nursery; and not to suffer it to be weakened by standing too close, before it is planted out where it is to stand. It is usual in some countries, and particularly in Scotland, to plant out Scotch firs at once from the seed-bed; but it must be in a country where there are neither hares nor rabbits.

Whether the Land to be Planted should be previously Dug, or not.—This depends on the nature of the soil. All that is required is, that the roots should have room to grow without obstruction. A light sand need not be made lighter by digging. Stiff heavy clays with a surface of only four or five inches of vegetable mould, require that surface to be deepened to admit the roots: such soils should be dug, or as it is called, *trenched*, two spits deep, burying the top-soil under; this should be done a year before planting, if possible, and the soil exposed to the sun and wind. The expense

pense will be about 8*l.* per acre. But it has been found by experience to be wrong, to plant it with a previous crop of potatoes. In *sands*, and other light soils, it will be quite sufficient to dig holes three feet and a half wide, and eighteen inches deep, at four feet and a half asunder, avoiding rows as much as possible, which will take about 2560 trees to an acre, and cost about 3*l.* 10*s.* per acre for digging the holes: these holes may be begun early in the autumn. The best earth put in the bottom, and the rest laid at the sides, so that the holes may be ready for the trees to be planted as soon as they are brought to the spot.

Directions for making Plantations on Poor Exposed Land, intended hereafter for Underwood, with a Mixture of Timber, or Fir Timber alone; with Hints for their future Management.—Plantations in exposed situations should always be so large, as that the trees may shelter each other; and whatever may be the trees desired to form the future plantation, a mixture of Scotch firs is necessary, to shelter the rest from the sun in summer, and the cold in winter. The former may be planted at eight feet and a half apart, viz. 640 to an acre, and then crossed with an equal number of Scotch firs, which will fill half the holes; the other half may be filled with plants of birch, Spanish chesnut, willow, hazel, &c. for underwood, or such of them as are proper for the soil. No other care will be necessary to this plantation, than to keep it well fenced. At three or four years old, when the birch, &c. have taken good root, and have begun to make strong shoots, cut them down to within three feet of the ground, and trim up the lower side branches of the forest trees intended for timber, to their bodies; but leave the firs untouched.

At

At about ten years after, cut off all the underwood, and such of the forest trees as are crooked and unfit for timber, at about five or six inches from the ground ; and cut down such of the firs as really obstruct the growth of young timber trees, but no others : the rest will continue to afford shelter to the timber trees, and should only be removed by degrees when they really do mischief. A young oak or ash will grow through the middle of the branches of a Scotch fir, without receiving any injury, especially if they are of the same age. If this plantation be intended hereafter for timber only, a mixture of many kinds of forest trees may be admitted, and will be the most ornamental when full grown ; but if a coppice of underwood, with a proper mixture of trees is desired, beech must be excluded : it is an unneighbourly tree, and suffers nothing to grow under it ; and Spanish chesnut and sycamore have, in general, too large heads to permit underwood to grow under them. Oak and ash are the fittest accompaniment of underwood ; and a small mixture of abeles and standard birches, to vary the colour in spring and autumn, will produce a beautiful effect. New planted coppices should be cut at ten years' growth for the two first rounds, and the number of timber trees reduced gradually at every cutting, by stocking off the unhand-some ones for underwood ; while, at the same time, the young plants which spring up spontaneously, should be encouraged for a future supply of timber. Let it be remarked, that if there be one, or even two handsome shoots, on a stool of an oak that has been once cut off for underwood, they may still be very profitably left for timber. Trees of that description will grow much faster, and be quite as good as real plants, provided the stool of the root be young and sound.

Situations for Planting, and Kind of Trees recommended.—*1st, On Hills.* On the high exposed tops of hills, it will be difficult to raise coppices of underwood, and indeed useless to attempt it. A large handsome grove of trees is all that can be expected, though the planting may be conducted in the same way as above recommended, so as to make as much shelter as possible to the bodies of the trees, when young; but the underwood will dwindle after the first cutting, and die in a few years. In such situations, oak trees must not be expected to prosper. Ash and sycamore, which have large resinous buds, and make large shoots, not liable to whip each other in the spring of the year, while they are tender, are the most likely to prosper, and more especially if the situation be exposed to the south-west wind. Beeches will thrive very well on hills, if not within reach of the spray of the sea: but on the steep *sides* of hills, particularly on the north or west sides, if the soil has a tolerable depth, as good underwood may be raised as in the most fertile *vallies*, and the shelter of firs in their infancy is not always necessary. In many parts of Gloucestershire and North Wilts, the profit that has been made by planting willow and ash for underwood, on the cold, nasty, and even boggy soil of the sides of hills, is almost beyond credibility. Eight pounds per acre per annum have actually been made of plantations of this description, in the neighbourhood of Highworth, on land not intrinsically worth 10*s.* per acre for any other purpose.

2d, In Vallies.—In making coppices for underwood with a mixture of timber, in vallies, the same rule as before given should be observed, as to the distance of the trees to be planted; but the Scotch firs may be omitted. If the land be a strong clay, it ought to be
trenched

trenched two spits deep, and then well drained with deep open drains before the trees are planted. If it be peaty, it should be dug up into beds, so as to break the whole surface; and then planted with such sorts of underwood as are most congenial to the country and the soil, with a proper mixture of such plants for timber, as are observed to grow well in similar soils and situations in the same neighbourhood; and the same after-management should be used as is hereinbefore recommended.

Time of Planting recommended.—Where a great number of trees are to be planted in one season, some must be planted early, and some late; and it must be acknowledged, that the seasons vary so much, that what is right in one year, is wrong in another. The great desideratum is to keep the roots of new planted trees steady and firm in the land, so that they may not be disturbed by the wind from getting nourishment and forming new fibres. Too much wet and too much drought are equally injurious to the roots. It therefore follows that, as a general rule, hot land should be planted early, and cold land late. A wet winter would be hurtful to the latter, and a dry spring to the former; and firs, and indeed all evergreens, should be planted in the spring: they carry too much sail to stand a windy winter. But avoid planting when the weather is very wet, and particularly when snow is on the land: it chills the earth, and renders it unfit for vegetation; on that account Christmas is generally the very worst time of the year for planting.

Plantations of Firs alone.—I have hitherto avoided speaking of plantations made of firs alone. There was

a time when they were patronized by the greatest, and recommended by the wisest men, and bounties were given by public societies for their encouragement ; but they have now the misfortune to be out of fashion. Even the larch, of which more has been said as to its durability, and variety of uses, than of any other tree, has lost the greatest part of its votaries ; and the whole genus of pines are now condemned as monotonous, unpicturesque trees, and banished from all *polite society*. I am old-fashioned enough to continue to think as every body else thought thirty years ago : I had rather see on a poor barren heath, even in the summer, a grove of handsome thriving Scotch firs, than a parcel of stunted half-starved oaks ; and in the winter, I am certain the evergreen has the advantage. I do not mean to say, that I would plant a clump of Scotch firs in the front of a gentleman's house, or indeed where any other trees would grow well ; but I would plant them in preference to any thing else, on poor barren heaths, where every other tree would starve ; and where they alone would thrive and flourish ; and in point of profit, if they were ever right, they are doubly so now. English oak has not advanced in price for the last forty years (till very recently) more than 50 per cent., and ash and elm not above 30, while the value of the best foreign yellow deal (produced from the *sylvestris pinus*, or Scotch fir) is increased 300 per cent., and English-grown deal is increasing in repute and demand, as a substitute for foreign deal, every day ; and firs not only grow faster than forest trees, but four firs will stand and thrive on the space which one oak will occupy. In the hope that the whole tribe may not be exploded, but that some may be induced to see the advantage of planting them on situations where picturesque beauty is not so essential,

essential; I will add a few short hints respecting the most proper and profitable sorts to plant.

The *Scotch fir*, which produces the real yellow deal, is the most valuable timber, especially if planted so thick that the knots may not be large, and if suffered to stand till a proper age.

Larch is the next best, and makes very good timber; little, if any, inferior to Scotch fir.

Pineaster produces a strong coarse timber, and in some situations grows faster than any other fir, particularly in Windsor-forest; but it is apt to grow crooked.

Spruce fir, *silver fir*, and *Weymouth pine*, all produce white deal, and therefore are of inferior value. The first is the best, and is very little, if any, inferior to the best white Norway deal. As to the kind of fir proper for exposed situations, the Scotch is by far the best, and spruce the worst. The latter will grow well and look well for the first thirty years; but it then gets mossy, thin, and ragged, and its duration is much shorter than that of a Scotch fir. Its appropriate situation is to stand single in a pleasure-ground, where its branches, feathered to the ground, and its conical shape, produce a good effect. *Larch* will grow faster than either; but its top-shoot being always above the other trees, and consequently not protected, is apt to bend and get crooked. It should stand on the sides of hills whose tops will be always above it; and as a mixture with Scotch firs, its colour both in spring and autumn makes a pleasant contrast. Silver firs are fit for very strong land, such as oaks delight in, but they are only fit to be planted in rows, or at great distances, as ornamental trees. *Weymouth pines* thrive best at the sheltered sides of plantations. The beauty of their

bark makes them ornamental; but the timber is too light and porous to be of much value. For large plantations, the Scotch fir and larch are the only trees to be recommended, adding a few of the other kinds in the skirts, and near the roads, for variety*.

* The foregoing remarks on Woods and Plantations have been before published in the Papers of the Bath Society.

CHAP. XI.

WASTE LANDS.

THE idea that the Wiltshire Downs (and particularly Salisbury Plain) are all "waste land," is so general, that few who have travelled over them, especially from Devizes to Salisbury, will believe the contrary; but in the common acceptation of the words "waste land," viz. "land in a state of nature, capable of cultivation, but of very little value in its present condition," the Wiltshire Downs are undoubtedly not "waste land;" and although many inconveniences attend their present mode of occupation, yet as a great proportion of them cannot be improved by tillage, it is doubtful whether they would produce more food if laid in severalty than they now do in their present hard stocked state, the very nature of their herbage making these Downs sweeter for sheep when close fed than if trained up like richer pastures.

There are in every part of this district common meadows, which, though valuable in their present state, might be made much more so, if put in a state of severalty; and there are many common marshes which might be improved by enclosing, but these are in general small, and it may be said with truth, that there are no very extensive tracts of waste land in this district. But in another sense of the words "waste land," viz. land already cultivated, but in a defective manner, "common-fields may be called the worst of

all wastes." Common pastures may, in some instances, be made the most of by mutual agreement, without a division; but common-fields never can be cultivated with any improvement to the land, or serious advantage to the occupier.

See more of Common-Fields in Chapter IV. Sections 2 and 3

CHAP. XII.

IMPROVEMENTS.

SECT. I.—DRAINING.

THE springs in South Wiltshire lying under the chalk hills, seldom “come to land” in situations or at seasons to injure vegetation ; for the most part they are not seen (except near the villages) until late in the autumn, and as the winter-springs are pretty regular in their time of coming and of duration, advantage is taken of them for assisting irrigation in the vales of the district.

There are through the parishes in general, ancient ditches or drains for taking these winter floods into the adjacent bourns or rivulets.

The very shape of the country naturally admits all surface-water to pass easily to the rivers, and for the reasons above stated, under-ground draining is almost unnecessary, and of course cannot be described as a general practice in this part of the county.

SECT. II.—PARING AND BURNING.

THE custom of “paring and burning land” is not general in this district, in preparing old arable land for a crop ;

a crop; but it is frequently, and indeed almost universally adopted in breaking up new down lands.

This practice is defended by many, as being the cheapest and best way of preparing such lands for the plough, and is totally condemned by others, on the principle, "that however good the husbandry may be for fathers, it is ruin to sons:" it is, therefore; an object of great moment, to endeavour to ascertain which of these positive assertions is true, or whether the truth may not lie between the two; and perhaps there is no one object under enquiry in the agriculture of South Wiltshire, which will be thought of so much real consequence by the landholders thereof.

First, then, we will enquire, "Whether this mode of husbandry be in itself beneficial? and next, Whether it will be properly applied in this district?"

"Paring and burning land," or, as it is called in Wiltshire, "burn-beaking," is perhaps coeval with, if not more ancient than ploughing.

A great part of this island was, doubtless, originally covered with wood, and when any land was to be reclaimed from that state, manual labour was alone applicable to the purpose. The wood was cut off, most of the roots were grubbed, and then the rough grass and moss, and the whole surface of the land, were chopped up with a curved-cutting mattock, and burnt to ashes, and thus the land was prepared for sowing. This mattock was called a "beak," and the operation was, therefore, and is still frequently, called "beaking and burning." No method, perhaps, could be better suited to the original purpose of cleaning rough encumbered land, in which it was almost impossible for horses or oxen to work a plough, than this operation of beaking; and the action of the fire not only consumed

sumed the roots and weeds, and other incumbrances, but corrected the acidity of the soil, and rendered it fit for the production of corn. The operation not only cleaned the land better and cheaper than it could have been done by the plough, but served as a manure for several successive crops; but unfortunately this custom, like many others originally good, has in some instances remained when its causes have ceased to exist, and in others has been applied under circumstances for which it was never intended.

“Paring and burning,” when properly applied, may be said to be one of the most powerful medicines known to the agricultural world; but if it be improperly used, it is a poison almost without an antidote.

To apply this remark to Wiltshire Downs, it may be proper to repeat here, that the native soil of the Downs may in general, though with some exceptions, be reduced to two distinct kinds, “the red land,” and “the black land.” The former is usually a deep, strong, cohesive, sour land, with an intermixture of flint, and a solid bed of chalk immediately under; the latter is a loose black surface, of the nature of peat, on a bed of flints or rubble chalk, and the chalk rock at some distance beneath. The red land lies generally on the tops of the hills, and great part of it was originally in a state of woodland: at this time much of it is incumbered with furze and stunted thorn-bushes. The black land usually occupies the valleys and sides of the hills, and though often shallow, is not unfrequently the sweetest feeding part of the Downs. A short blanking heath is found on many parts of it; but this production is much oftener the effect of the want of stock, than of any particular poverty in the land; for it is a well known fact, that many downs which were “sweet and good”

good" within the memory of man, are now, in consequence of this neglect, entirely covered with heath. Large tracts of both these kinds of land have been broken up, and almost all brought into cultivation, by the same means, viz. "burn-beaking;" and the immediate effects have been nearly the same, viz. that of producing several successive crops without any other kind of manure; but the duration of these effects has been very different. The red land being capable, with proper after-management, of remaining in tillage, has been considerably improved in value; but the black land has been reduced (after the heat of the fire has been exhausted) by two or three crops, to a mere bed of dust, without tenacity or cohesion, and thereby rendered for a series of years totally unfit for the vegetation of corn or grass. The fire having apparently the same effect upon it, as spirituous liquors have on the human body, viz. that of calling forth false, unnatural, and forced exertions, which the frame cannot long support, and thereby eventually ruining the constitution. These opinions respecting the nature of the soil of the Wiltshire Downs, have been digested from a long acquaintance with and observation of them; and if they are rightly taken up, the following general rules may be deduced from them. No Down land should be broken up, "but such as will bear corn for a continuance," after the stimulus excited by the first burn-beaking has subsided. No Down land will bear corn for a continuance, unless it be manured with some permanent alterative manure, and there is no such to be had on the Wiltshire Downs, but chalk.

The red land will in general bear chalking; the black land seldom or never. The red land, therefore, particularly such as is deep in its staple, if it be strong, cohesive,

cohesive, and sour, and incumbered with bushes or furze, may in general be broken up; and if it be intended to properly chalk it afterwards, no great harm will accrue from burn-beaking it previous to the first crop. Great care however is necessary to pare the surface very thin, and to burn as little of the earth as possible. This is perhaps not only the cheapest, but the best way of bringing such land into tillage.

The black land should by no means be broken up. It is always too light, and generally too thin, for a state of tillage. Chalk has apparently very little effect upon it; if any, that of making it lighter.

But however proper burn-beaking may be in some cases for breaking up new land, it is a matter of very serious consideration, how far the practice of burn-beaking lately introduced, and which seems to be gaining ground as a general system, upon old arable land on Wiltshire Downs, can be reconciled with the rules of good husbandry.

This practice seems to have a tendency to subvert the long established husbandry of Wiltshire, "the sheep-fold," and to introduce a system which, however proper it may be in other parts of the kingdom, is not at all applicable to this district, and appears to carry with it the seeds of its own destruction.

The grand defect in the soil of great part of the Wiltshire Downs, viz. that it is too light and too thin, is remedied by the sheep-fold, which renders the land closer and firmer. If this system be right on such land, that of burn-beaking must be wrong.

The practice of burn-beaking, in my opinion, originates in that "pride or vanity of sheep-stock," which has already been fatal to a neighbouring county, "Hants," and is doing much mischief to the hills of Gloucestershire.

SECT. III.—MANURING.

IN Chapter VII. we have already remarked, that the general manure of this district is the sheep-fold. This practice is continued through the year; but the great dependence, as we have observed, is for the barley crop. In the common-fields, sheep, which are sent by the occupiers of yard lands, are kept in one flock by a common shepherd, and are folded regularly over the whole field, the fold being shifted every night. The size of the fold is regulated by the size of the field: they have to manure, so as to get over the whole of it in time for sowing; the usual rule is, to allow a thousand sheep to fold what is called a *tenantry acre** per night.

In situations where the water-meads are small, and consequently few ewes are kept, attempts have been made "to plough in green crops for manure;" but the tenantry customs have hitherto prevented its being carried to any great extent; and the divisions of the common-fields have been as yet too recent, to make any new kind of husbandry general. The only thing of this kind which can be adopted in a tenantry field, is frequently done with success, viz. the sowing vetches, as a preparatory crop to wheat, particularly on heavy land. This crop is substituted for clover, to prevent the land from getting tired of the latter.

Some farmers have practised this system in the fallows for wheat, on the light soils of the district. But it is condemned, as rendering the wheat field too loose and open at seed time, and through the following winter.

Top-dressings are not in general use in this district.

Soot is sometimes put, in the spring, upon weak

* About three-fourths of a statute acre.

crops of wheat, and coal-ashes frequently upon young clover; and perhaps more would be used, if they could be easily procured; but both soot and coal-ashes are too dear and scarce, to be used generally, except in the neighbourhood of great towns.

About Devizes great improvements have been made upon the sands and sandy loams, by the application of coal-ashes, both on arable and pasture land.

In the Pewsey Vale, about Maningford, much peat has been dug and burnt, and the ashes used with success; but the peat is not so good as that in the neighbourhood of Newbury, in Berks.

Woollen rags are frequently and very successfully used on the strong loams in the Canning's Vale.

The foregoing are the principal temporary manures of the district; but there are some spots and veins of land, where chalk and lime have been applied as permanent manures with the greatest success.

Chalk.—Chalk is well known to be a corrector of land that has acidity in it, or such as (to use the Wiltshire phrase) wants to be “sweetened,” to make it bear barley.

There are three kinds of land in this district, on which chalk acts with essential service.

1st, On the red strong lands on the highest part of the Downs.

2dly, On the sand veins, particularly on those which are deep and tough, and are of the nature called in Wilts, “liver sand.”

3dly, On the strong oak-tree clay, or rather loam, in the valley at Mere Sedgemoor and Semley.

The red strong land on the high level parts of the Downs, which was once woodland, and sometimes expressly

pressly called "wood-sour land," is astonishingly improved by chalking. The chalk is generally dug under the surface, but too often too near the surface. The upper stratum of the chalk is hard, and not soluble, and will always remain in small broken pieces in the land, making it loose, or as it is provincially called, "rubbly." The chalk should be dug deeper from one great pit, and should be carried in carts instead of wheel-barrows.

The expense of chalking such land with wheel-barrows, is seldom more than 5*l.* per acre, sometimes as low as 2*l.*

The usual quantity of chalk laid on land of this description, is 16 wheel-barrows, or a cart-load, on a square perch, viz. 160 cart-loads on an acre. Autumn is the best season for laying it on, and it will be frequently required to lie three years before it is dissolved. The land requires a thin ploughing, or light rafter, about Christmas, and should then lie till about Midsummer, when it may be clean ploughed, and will be fit for sowing with wheat in seven or eight weeks afterwards.

The second kind of land, viz. the deep tough sands which run round the skirts of the Downs, appear to have been nearly all chalked already, though much of it was done before the memory of man. The deep chalk pits on the edge of the Downs adjoining, or near to those veins, are a sufficient proof of it, and whether it be well or ill done, it is considered to be done for ever; and the idea that such land will not bear chalking a second time, is so strong and general among the farmers, that, in their opinion, and to use their own expression, "You may as well inoculate a man for the small-pox who has had it already."

This

This observation surely deserves particular enquiry, and if the fact be as it is here stated, how necessary is it that a due quantity of chalk be applied in the first instance; and how advantageous would it be to the landlords to be at part of the expense, and to have the land well dressed, rather than leave it to tenants, who in many cases are not judges of the proper quantity, and in others cannot, or will not, afford the expense of putting it on.

The difference now observable in the goodness of the sand veins, and frequently within a very short distance, may perhaps in some degree be accounted for by their having been well or ill chalked; and the continued and almost inexhaustible fertility of some of them; though chalked before the memory of man, shews the vast improvement derived from a proper application of this valuable manure.

But perhaps the greatest improvement made by chalk in this district is on the deep oak-tree loams about Mere, Knoyle, Sedgehill, and Semley. This is a low flat tract of land under the foot of the chalk-hills, of a strong deep loam, with a substratum of clay, over a very thick vein of blue marble. The soil is very sour, as appears by its abundant and spontaneous production of oak trees. The occupiers of this land have long since known the use of marl, and have used it to great advantage. The customary way was to lay it on preparatory to a crop of wheat, about 120 cart loads, or 80 waggon loads per acre.

They then took six, eight, or ten successive corn crops, and when the land was exhausted, laid it down to grass, to re-acquire by rest what it had lost by exertion; but of late years they have introduced the use of
WILTS.] I chalk,

chalk, which they fetch from the edge of the Downs at the distance of two or three miles, and lay usually from 20 to near 30 waggon loads on an acre. They generally put the chalk on grass land immediately from the pit, and let it lie on the ground till it is slacked, which will sometimes be two or three years. This manure is usually applied to land intended to remain in a state of pasture (the country being in general applied to the dairy), and the improvement that has been made by it, even upon land previously exhausted by ploughing, is astonishing, frequently to double, and sometimes treble, its former value.

In some cases they use chalk on arable land, leaving it in heaps for a year or two ; so as to slake it previous to its being spread on the land ; but as this is followed by repeated crops of corn, the land is often laid down to grass in an exhausted state : the profit goes into the tenant's pocket, and the land is left but little the better for the chalking.

Lime.—Lime is not generally used as a manure in this district ; it is in most parts too scarce and too dear for that purpose, the kilns barely providing sufficient for building. Chalk is almost the only limestone of the district ; and though most of the hills are composed of chalk, the veins are very different, and a few only are applied to the purposes of lime. More perhaps might be found equally applicable with those in use, and consequently more lime might be appropriated to manure ; but the dearth of fuel prevents many attempts of the kind being made.

In those situations where lime can be procured at a tolerably reasonable price, especially in the neighbourhood

hood of Warminster, it has been found to be a valuable manure on the thin, light, sand veins, particularly on such as are mixed with gravel.

The vein of poor gravelly soil, which runs parallel with the sand vein from Sir Richard Hoare's tower, over Horningsham, Deverill, and Warminster commons, is peculiarly adapted to lime. The Marquis of Bath has for many years used it in bringing into cultivation a tract of this kind of poor land, which he has annexed to his park.

Lime has generally been applied on land newly broken up previous to a wheat crop, and with great success. The quantity per acre varies from 20 to 30 quarters. But a just proof of its utility as a permanent manure on this kind of land, may be seen in Longleat park, where it has been laid about 25 quarters per acre fresh from the kiln, upon the loose gravelly sides of the steep hills in a state of pasture. On these parts, though the land was previously covered only with moss and coarse grass, the lime has brought vegetation so near the surface, and consequently encouraged the growth of the finer grasses, especially of the annual poa and the white trefoil, that the cattle, particularly sheep, feed upon them in preference to the best land in the park; and its effects do not appear to decrease on those parts which were so manured from 20 to 30 years ago.

Lime has also been tried with success, on those sandy arable lands which were formerly chalked, but in which the effects of the chalk are wearing out.

But it is fair to remark, that there are some reasons to believe (though it certainly merits further trial) that lime does not succeed a second time on sandy or gravelly soils, on which it was once used in large quantities

as an "alterative manure." Neither have any great effects been visible from its use as an alterative on strong clay lands, although the Marquis of Bath and many other persons have tried it on such soils; but when mixed with earth, and used soon afterwards as a top-dressing, it has succeeded on land of that description, particularly when laid upon after-grass in July or August. It has also been frequently and repeatedly used, and with much success, as a top-dressing for a wheat crop, on land of the same kind in an arable state.

The effects of lime, when used as an alterative or as a stimulant, appear to be very different.

I shall not venture an opinion on the causes of this difference; but I think the subject deserves a further investigation. The result of my observations is, that lime is frequently of essential service to pasture lands in hot soils, but no where ultimately beneficial to arable.

The foregoing are the only permanent manures in use in this district.

SECT. IV.—IRRIGATION.

IRRIGATION, which is justly called by Mr. Kent, "the greatest and most valuable of all improvements," was generally introduced into this district at the latter end of the seventeenth, or at the beginning of the eighteenth century. Many of the most valuable and best formed meadows, particularly those in the Wyley Bourne, were made under the directions of one farmer
Bayer-

Baverstock, of Stockton, between the years 1700 and 1705.

An imperfect scheme of watering had undoubtedly been practised before that period. Its introduction indeed into this district may perhaps be almost coeval with the practice of sheep-folding, with which it is intimately connected; but the regular mode in which those systems are now conducted is certainly not very ancient. Many old farmers, who have died within the memory of man, remembered when neither the water-meadow nor the sheep-fold was managed on any regular plan.

Theory of Water-Meadows.

The idea of watering meadows, as far as it relates to the bringing of water upon the land, was taken from nature. It must have been always observed, that winter floods produced fertility, provided the water did not remain too long.

The idea of taking the water off the land, and bringing it on again at will, is the suggestion of art; and the knowledge of the proper time of doing this, is the result of observation.

A water-meadow is a hot-bed for grass. In what manner water acts upon land, so as to accelerate vegetation, is a philosophical problem, which it is not the farmer's province to solve:—it was sufficient for him to know that the fact was so. Observations on the effects of water so brought on, soon shewed him at what period its good properties ceased to act, and when it began to do mischief. This observation, therefore, regulated the time of keeping the water on the land; and as this period varied according to the nature of the
13
soil,

soil, and the season of the year, it became necessary that he should have such a command of the water as to take it off immediately when he found the state of the land required it. This produced by degrees that regular disposition of water-carriages and water-drains which, in a well laid out meadow, bring on and carry off the water as systematically as the arteries and veins do the blood in the human body.

As water-meadows are totally unknown in some parts of the kingdom, and but very partially known in others, and as there is perhaps no county in which the system of watering meadows is so well understood and practised as in South Wiltshire, we shall here speak a little more fully of their nature and properties.

Nature and Properties of Water-Meadows.—It has been already premised, that the grand principle of a water-meadow is the power of bringing on and carrying off the water at pleasure; and if this object can be accomplished, it is not material what the shape of the meadow is, nor that the disposition of the trenches, (provincially called “the works of the meadow”) should be uniform; but as very little land can be entirely commanded by water, unless its inequalities are reduced by manual labour, it has been found convenient to adopt two kinds of water-meadows, one for land lying on declivities, which must in general be watered from springs or small brooks, and the other for low land near rivers, which is watered from those rivers.

The first kind is called in Wiltshire, a *catch-work meadow*; and the latter, a *flowing meadow*: the latter is the most general kind in this district.

It

It is impossible to give any intelligible written description of the mode of making these meadows: this operation must be seen, to be properly understood.

Catch-work Meadows described.—But to elucidate the distinction between two kinds of meadow, and to give some idea of what are the situations in which they may be introduced, it may be necessary to remark, that the “catch-work meadow*” is made by turning a spring, or small stream, along the side of a hill, and thereby watering the land between the new cut (or, as it is provincially called, the “main carriage”) and the original water-course, which now becomes the “main drain.” This is sometimes done, in particular instances, merely by making the new cut level, and stopping it at the end, so that when it is full, the water may run out at the side, and flood the land below it. But as the water would soon cease to run equally for any great length, and would wash the land out in gutters, it has been found necessary to cut small parallel trenches, or carriages, at distances of 20 or 30 feet, to catch the water again; and each of these being likewise stopt at its end, lets the water over its side, and distributes it until it is caught by the next, and so on, over all the intermediate beds, to the main drain at the bottom of the meadow, which receives the water, and carries it on to water another meadow below, or, if it can be so contrived, another part of the same meadow on a lower level.

To draw the water out of these parallel trenches or carriages, and lay the intermediate beds dry, a narrow deep drain crosses them at right angles, at about every

* This kind of meadow is very common in Devonshire.

nine or ten poles length, and leads from the main carriage at top to the main drain at the bottom of the meadow.

When this meadow is to be watered, the ends of the carriages adjoining the cross-drains are stopt with turf dug on the spot, and the water is thrown over as much of the meadows as it will cover well at a time, which the watermen call a *pitch of work*; and when it is necessary to lay this pitch dry, they take out the turfs, and let the water into the drains, and proceed to water another pitch.

This kind of water-meadow is seldom expensive, the stream of water being usually small and manageable, few hatches are necessary; and the land lying on a declivity, much less manual labour is required to throw the water over it regularly, and particularly to get it off again, than in the flowing meadows. The expense of making such a meadow is usually from 3*l.* to 5*l.* per acre; the improvement frequently from 15*s.* an acre to at least 40*s.*; the annual expense of keeping up the works and watering the meadow, which is usually done by the acre, seldom so high as 10*s.* 6*d.* per acre.

Flowing Meadows described.—In the formation of the “flowing meadows,” much more labour and system are required. The land applied to this purpose being frequently a flat morass, the first object to be considered is, how the water is to be *carried off* when once brought on; and in such situations, this can seldom be done without throwing the land up in high ridges, with deep drains between them.

A main carriage is taken out of the river, at a level high enough to command the tops of the ridges, and the water is brought by small trenches, or carriages, along

along the top of each ridge, and, by means of moveable stops of turf or earth, is thrown over or on each side, and received by the drains below, whence it is collected into a main drain, and carried on to water other meadows, or lower parts of the same meadow. A tier of these ridges, watered at one time, is called a *pitch of work*. The size of the ridges varies according to the supply of water, but in general they are about 30 or 40 feet wide, and 9 or 10 poles long.

It is obvious from this description, that as the water is here used only once in *one pitch*, this method is only applicable to large streams, or to vallies subject to floods; and that as the ridges must be formed by manual labour, and the hatches requisite to command the water on rivers, must be much more expensive than those on small brooks. The first cost of the *flowing meadow* is considerably greater than that of the more simple method first described.

The expense of making a *flowing meadow* will vary from 12*l.* to 20*l.* per acre, according to the difficulty of the ground, and the quantity of hatch-work required; but the increase in the value of the land by this operation, is astonishing. The abstract value of a good water-meadow may fairly be stated at 5*l.* per acre; but its value when taken as part of a farm, and particularly of a sheep-breeding farm, is almost beyond computation; and when such a meadow is once made, it may be said to be made for ever; the whole expense of keeping up the works and watering it, not exceeding 7*s.* per acre yearly, and the expense of the hatches, if they are well made at first, being a mere trifle for many years.

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Supposed Quantity of *Water-Meadows* in this District.

trict.—The number of acres of land in this district under this kind of management, has been computed, and with a tolerable degree of accuracy, to be between 15 and 20,000 acres*.

Indeed it has been found so very beneficial, that very few spots of land capable of being watered, remain otherwise, unless where some water-mill stands in the way, or where some person, who has the command of the water above, refuses to let it be taken out of its natural course to water the lands below.

Some new meadows might be made, and very great and beneficial alterations in the old ones, if a plan could be adopted to get the command of water where necessary for this purpose, and particularly in the case of water-mills: a remedy for this will be afterwards proposed.

“Water-Meadows do not make a Country Unhealthy.”—It has been alleged, by those who know very little of water-meadows, that they render the country unhealthy, by making the water stagnant. Daily observation shews that this opinion is erroneous, and the reason is obvious. We have already observed, that a water-meadow is “a hot-bed for grass;” the action of the water on the land excites a fermentation; that fermentation would no doubt finally terminate in putrefaction; but the moment putrefaction takes place, vegetation ceases. Every farmer knows the commencement of this putrefaction, by the scum the water leaves on the land; and if the water be not immediately taken

* Some considerable additions have been made to the water-meadows of the district since this calculation, but the figures are given from the Original Report.

off, the grass will rot, and his meadow will be spoiled for the season. The very principle of water-meadows will not allow water to be stagnant; it must be always kept in action, to be of any service. But besides this, many of the best meadows were, in their original state, a stagnant unwholesome morass: the draining such land, and making it so firm that the water may be taken off at will, must surely, instead of injuring a country, essentially contribute to the salubrity of the air.

"Great Advantages arising from Water-Meadows."

—It is frequently asked, how it comes to pass that, although water-meadows are so useful as to be almost an indispensable appendage to a South Wiltshire farm, yet, in other counties where they are not known, the want of them is not felt? nay, that there are even in this district many parishes which have none, and which breed lambs without them. To this I answer, that the fair question is not, "how do other countries manage without them;" but, "how could the farmers of this district, who are so fortunate as to have water-meadows, pursue their present system of sheep-breeding, if those meadows were taken away?"—a system, which I do not hesitate to say, is more profitable to themselves, their landlords, and the community at large, than any other that could be substituted in its room. This question cannot perhaps be answered better, than by exhibiting the contrast between those who have water-meadows, and those who have none, in the same district.

Every farmer who keeps a flock of sheep, and particularly a breeding flock, in so cold and late springing a district as South Wilts, knows and feels the consequences of the month of April—that month between
 hay

hay and grass—in which he who has not water-meadows for his ewes and lambs, frequently has nothing. The ewes will bring a very good lamb with hay only: perhaps a few turnips are preserved for the lambs, which, in a very favourable season, may last them through March; but they are then obliged to go to hay again; the ewes shrink their milk, the lambs “pitch and get stunted,” and the best summer food will not recover them. To prevent this, recourse is had to feeding the grass of those dry meadows that are intended for hay, the young clovers, and frequently the young wheat; in fact, every thing that is green. And who will pretend to estimate what is the loss that a farmer suffers by this expedient?

The ray-grass on the exposed parts of this district, is seldom “a bite” for the sheep till May-day. If the season should permit any turnips to be kept till that time, which can seldom be depended upon (the observations respecting Swedish turnips in Chap. VII. Sect. 11, are a proof of the correctness of this sanguine opinion of water-meadows expressed by the Original Compiler), they are not only of little nourishment to the stock, but they exhaust the land, so as to prejudice the succeeding crop; and it ought to be remarked, by the way, that in many parts of this district, the soil is not at all favourable to the production of turnips. It therefore necessarily follows, that a farmer under these circumstances has no certain resource to support his stock during this month, but hay; and even in that he is sometimes disappointed, by having been obliged in the preceding spring to feed all the land which he had laid up for a hay crop. He is then under the necessity of buying hay, and that frequently at the distance of many miles; and to add to this distress at this critical time,

time, his young ewes are brought home from wintering, to be kept nearly a month on hay alone.

In this month, which so often ruins the crops and exhausts the pockets of those sheep-breeding farmers who have no water-meadows, the water-mead farmers may be truly said to be "in clover." They train up their dry meadows early, so as almost to ensure a crop of hay; they get their turnip land fed off in time to prepare it for barley, and they have the great advantage of a rich fold to manure it; they save a month's hay, and have no occasion to touch their field grass till there is a good bite for their sheep; and their lambs are as forward at May-day, as those of their less lucky neighbours are at Midsummer; and after all, they are nearly certain of a crop of hay on their water-meadows, be the season what it may.

Management of Water-Meadows.—The management of water-meadows, as well as it can be described in an account necessarily concise, is as follows:—in the autumn the after-grass is eaten off quite bare, when the manager of the mead (provincially the *drowner*) begins to clean out the main drain, and the main carriage, and to "right up the works," that is, to make good all the carriages and drains which the cattle have trodden in, so as to have one tier or pitch of work ready for drowning. This is immediately put under water (if water be plenty enough), whilst the drowner is preparing the next pitch.

In the flowing meadows, this work ought to be done, if possible, early enough in the autumn to have the whole meadow ready to catch the first floods after Michaelmas; the water being the first washing of the arable

arable lands on the sides of the chalk-hills, as well as of the dirt from the roads, is then thick and good.

The length of this autumnal watering cannot be precisely stated, as much depends upon situations and circumstances; but if water can be commanded in abundance, the custom is, to give the meadows a "thorough good soaking at first," perhaps for a fortnight or three weeks, with an intermission of two or three days during that period; and sometimes for the space of two fortnights, allowing an interval of a week between them. The works are then made as dry as possible, to encourage the growth of the grass. This first soaking is to make the land sink and pitch close together; a circumstance of great consequence, not only to the quantity, but to the quality of the grass, and particularly to encourage the shooting of new roots, which the grass is continually forming, to support the forced growth above.

While the grass grows freely, a fresh watering is not wanted; but as soon as it flags, the water must be repeated for a few days at a time; always keeping this fundamental rule in view, "to make the meadows as dry as possible after every watering; and to take off the water the moment any scum appears upon the land, which shews that it has already had water enough."

Some meadows that will require the water for three weeks in October, and the two following months, will not perhaps bear it a week in February or March, and sometimes scarcely two days in April and May.

In the catch-meadows, which are watered by springs, the great object is, to keep the works of them very dry between the intervals of watering; and as such situations are seldom affected by floods, and generally have
too

too little water, it is necessary to make the most of the water, by catching and rousing it as often as possible; and as the upper works of every pitch will be liable to get more water than those lower down, a longer time should be given to the latter, so as to make them as equal as possible.

Custom of Feeding Water-Meadows with Sheep.—

We have already remarked, that the great object of an early crop of water-meadow grass, in this district, is to enable the farmer to breed early lambs.

As soon as the lambs are able to travel with the ewes (perhaps about the middle of March), the flock is put into the water-meadows. Care is, or ought to be taken, to make them as dry as possible for some days before the sheep begin to feed them; and on account of the quickness of the grass, it is not usual to allow the ewes and lambs to go into them with empty bellies, nor before the morning dew is gone. The general hours of feeding are from ten or eleven in the morning, till four or five in the evening, when the sheep are driven to the fold, which at that time of the year is generally on the barley-fallow.

The grass is daily hurdled out in portions, according to the number of sheep, to prevent their trampling it down; but a few spaces are left in the hurdles, for the lambs to get through, and feed forward in the fresh grass. One acre of good grass will be sufficient for 500 couples for a day: the great object is, to make the water-meadow grass last till the barley sowing is finished.

Meadow laid up for Hay.—As soon as this first crop of grass is eaten off by the ewes and lambs, the water

water is immediately thrown over the meadows*, and they are then made perfectly dry, and laid up for hay. Six weeks are generally sufficient for this crop: it seldom requires eight, and there have been instances of great crops being produced in five weeks.

Nature of Water-Meadow Hay.—The grass of water-meadows being frequently large and coarse in its nature, it is necessary to cut it young; and if it be well made, the hay is of a peculiarly nourishing milky quality, either for ewes or dairy cows.

In some instances the water-meadows are laid up for a second crop; but this is only done when hay is scarce: not that the practice is supposed to be injurious to the land; but the grass being of that herbaceous soft nature, takes so much time to dry, that the hay is seldom at that season well saved. The grass is of much greater value to be fed with dairy cows. A flush of after-grass so early and so rank, will be precisely of the same comparative service to the dairy, as the spring feed has been described to be to the ewes and lambs. The cows remain in the meadows till the drowner begins to prepare for the winter watering.

Water-Meadows safe for Sheep in the Spring, but will rot them in the Autumn.—Water-meadows are considered to be perfectly safe for sheep in the spring, even the land that would rot them if it were not watered; but in the autumn, the best water-meadows are supposed to be dangerous. This, at present, is a

* Two or three days are sufficient for each catch at this season of the year.

mystery in the operations of Nature ; and a discovery of the reason might perhaps tend, in some measure, to a discovery of the causes of the rot in sheep. But the circumstance itself is rather an advantage than otherwise to this district, as it obliges the farmers to keep a few dairy cows to feed the water-meadows in the autumn, and to provide artificial grasses, or other green crops, for their sheep during that period.

Proper Soils for Water-Meadows.

From what we have so repeatedly urged on the necessity of making water-meadows, dry as well as wet, every reader must have inferred the advantage of having them, if possible, on a warm absorbent bottom*.

The bottom or subsoil of the water-meadow, is of much more consequence than the quality or depth of the top-soil. But it must not be inferred, that land whose substratum is peat or clay, cannot be considerably improved by watering, for there are many good meadows on such soils ; yet it is proper to remark, that they are not so desirable, on account of the difficulty of drawing the water from them, and making them firm enough to bear treading.

A loose gravel, or what is perhaps still better, a bed of broken flint, with little or no intermixture of earth, wherever it can be obtained, is the most desirable bottom.

* There is a striking proof of the truth of this remark in the water-meadows near Hungerford, and particularly at Standen. Although they are laid out in no regular plan, and in many instances there are no drains to empty the water carriages, yet the gravel bottom is so very absorbent, that the water will soak out in a few hours, and the meadows be left as dry as if they were watered on the most systematic plan : and few meads in the county produce better crops, either of spring feed or of hay.

In many of the best meadows in this district, where the substratum is a warm absorbent gravel, or a bed of broken flint, the soil is not six inches in depth, and yet it is quite sufficient, in seasons when water is plenty; as the grass will root in the warm gravel in preference to the best top-soil whatever, and such meadows always produce the earliest grass. Nor is it very material of what kind of grasses the herbage is composed, when the meadow is made: if there be always a sufficient quantity of water at command, that kind of grass will predominate which best agrees with the soil and the water; but if the supply of water be irregular, those grasses will prevail which can bear wet and dry; and it is a circumstance worthy of our notice, that some of the worst grasses in their native state, will become the best when made succulent by plenty of water.

SECT. V.—LONG GRASS MEADOWS.

Nature has given us a striking lesson on this subject in this district, viz. in the two small meadows at Orcheston (a village lying about six miles to the N. W. of Amesbury), usually called the "Long Grass Meads."

These meadows adjoin each other, and contain together only two acres and an half; and yet the crop they produce, in some seasons, is so immense, and of so good a quality, that the tithe hay of them was once sold (according to the information of the tenant) for the sum of five guineas.

Much has been said and little understood about the meadows, and the grass they produce. Many pro-

sals and attempts have been made to propagate the grass, and many skilful botanists have returned from the spot, without discovering which was the long grass, so different is its appearance at different seasons.

It has been, however, lately discovered by Mr. Sole, of Bath, and communicated to the Bath Society, that the greatest part of the herbage of these meadows is nothing more than the "black couch," or "couchy bent," the *agrostis stolonifera*, one of the worst grasses, in its native state, which the kingdom produces, and the peculiar plague of the farmers of this district. It usually abounds in such arable land as is too poor to bear the white couch (*triticum repens*), and is the general and almost only herbage of the old, burn-beaked, worn-out downs, and in that situation is so coarse and wiry, that no cattle will eat it: it forms a thick tough covering over the lands, which preserves itself, and destroys every thing else. But in these meadows, when fed abundantly with water, it is of a juicy nourishing quality, and makes the most desirable hay in the district, particularly for sheep. These meadows lie in the upper part of the bourne that runs from Tilshead to Stapleford, and, in some winters, the rivulet that passes through them is very inconsiderable. They are not laid out in any regular form for watering, the supply of water being too partial; but they depend entirely upon the floods; and being situated at a sharp turn of a narrow part of the valley, the water makes an eddy, and deposits its sediment upon them. The substratum of these meadows is an almost entire bed of loose flints, in which the roots of grass freely run, and produce strong succulent shoots, which fall down, and taking root at the joints, send forth other shoots, which in like manner drop and root again, so that the stalk is fre-

quently eight or ten feet in length from the original root; and though the crop is exceedingly thick, it is perhaps not 18 inches in height.

But this grass, though very abundant in these two meadows, prevails in most of the meadows which lie below them on the same stream; and whenever the winters are productive of floods, the grass in all of them is abundant in quantity and succulent in quality, and the hay is exceedingly nutritive; but in a year when water is scarce, their produce is extremely small, and of a very bad quality*.

On examining other meadows in different bournes of this district, we find the same grass uniformly to abound in those situated near the spring-heads, and which in some years have plenty of water, and in others none at all. The same remark on its variation in quality and quantity, according to the wetness or dryness of the winter, is equally just.

The most probable way of accounting for it is, that it is almost the only grass common to water-meads that will stand wet and dry; for though it flourishes most when under water, yet no dry weather will kill it.

Clauses in Acts of Enclosure.—It is customary, and absolutely necessary in the enclosure of common meadows, to give the Commissioners full power to direct, alter, and regulate the flooding of the several allotments to be set out therein; and great improvements might be made, if new carriages and drains were allowed out of the public funds of such enclosures.

* This is exactly the case at present (May 1810): there has been so little water in the meadows, that it was difficult to procure a fine specimen of the long grass to send up in turf to the Board of Agriculture.

CHAP. XIII.

EMBANKMENTS.

WILTSHIRE being an inland county, and the rivers within this district seldom flowing with any degree of impetuosity, or extending far from their natural banks, no observations are necessary on this subject.

CHAP. XIV.

LIVE STOCK.

SECT. I.—CATTLE.

OXEN are not generally used for ploughing in this district; in some parts, where the cow-downs have been divided, they are less used than formerly; and it is very probable that the gradual decrease of cow-downs, which will be the consequence of the land's being put into severalty, will tend gradually to abolish the working of oxen, especially on the hilly parts of the district.

In the sand veins, where the land runs kindly to pasture, the putting the common-fields in severalty will have perhaps the contrary effect; but it must not be imagined, that the arguments which have been so often and so successfully urged, on the comparative advantages of using oxen instead of horses, are not known or understood in Wiltshire. There are local reasons peculiar to many parts of this district, which will always prevent oxen from coming into general use. The first and principal one is, the present scarcity of enclosed grass land, and the very little tendency apparent in a large portion of the soil to pasture; the next is the peculiar difficulty of working them on the public roads, on account of the distance at which many farms are situated from market; the steepness of the hills, and the sharp flints with which the roads abound.

This

This last reason necessarily obliging every farmer who carries corn to market to keep at least six horses, the use of oxen is in a great measure superseded among small farmers, and the large ones are unfortunately, not only in Wiltshire, but in most other counties, too fond of stout fine horses, and their men too proud of shewing them, to give them up for oxen.

There are, however, exceptions to this remark. Some of the most intelligent farmers persevere in the use of oxen, and find them (especially since they have exchanged the yoke for the collar) to answer a very good purpose. As a shifting stock, where a farmer wants more strength at one time of the year than another, oxen are peculiarly proper, they being more easily bought and sold, and at a less loss or risk than horses; and where a farmer has a quantity of rough down lands, I am clearly of opinion, that the treading of a few oxen will increase the sheep-feed more than their eating will diminish it. I have seen so many instances of downs decreasing in goodness, when changed from cow-downs to sheep-downs, as fully to convince me of this fact.

Cow Stock.—Although milch cows have paid very well of late, and milk and butter are indispensably necessary, the rage for keeping “fine sheep” has almost driven cows out of this district; and were there not a necessity of keeping them to feed the water-meads in the autumn (when they are not safe for sheep), and to eat barley straw, and to make manure in the winter, there would soon be very few cows in South Wiltshire.

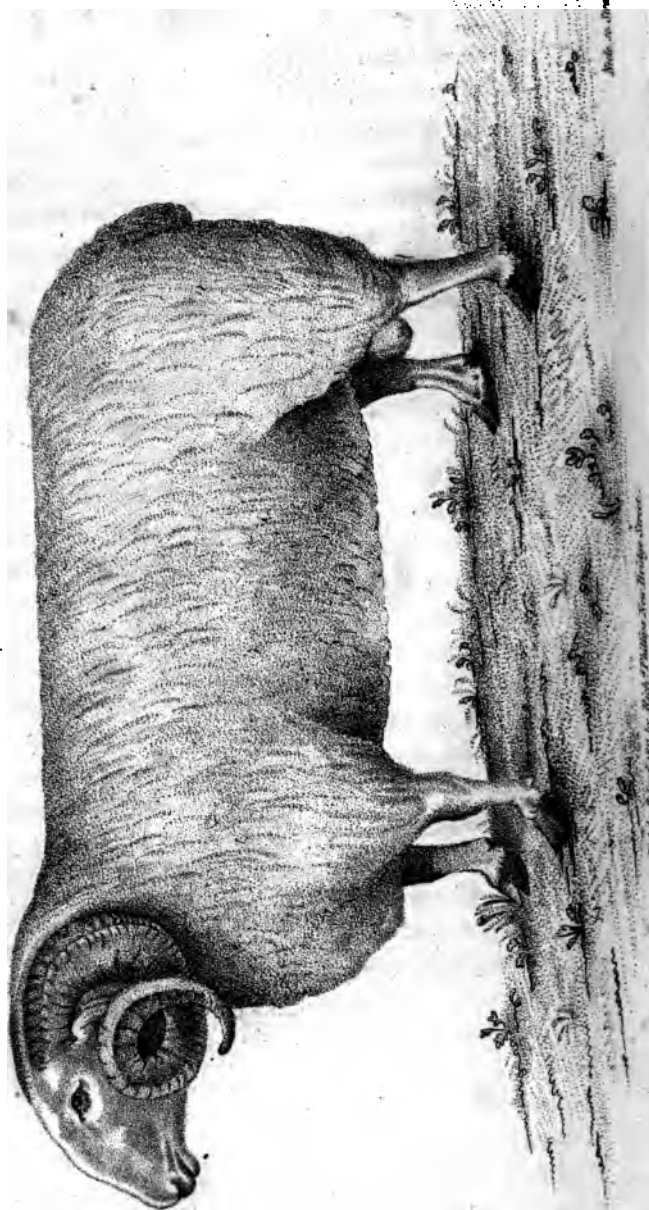
As cows are not a favourite stock in the corn part of this district, the farmers are of course not very particular about their breed. The great farmers frequently

let their dairy cows by the year ; the usual price is from 7*l.* to 10*l.* per cow. The cows are kept, and fresh ones supplied when necessary, by the landlord.

In a larger portion of the south-west skirts of the district, adjoining to Dorsetshire, viz. at Sedgehill, Semley, &c. great numbers of cows are kept purposely for making butter, and which, with the contiguous parts of Dorsetshire and Somersetshire, furnish the chief supply of butter that is used, not only in Bath and Salisbury, but also in the towns immediately in the neighbourhood of the great cheese dairies in North Wilts. We may here remark, that the North Wiltshire dairies seldom make any except whey butter, while the above-mentioned district makes so little cheese, that the towns in its neighbourhood buy the greatest part of their cheese from Somersetshire or North Wiltshire.

Whether there really be a particular disposition in cows of one district to produce more butter, and the other to produce more cheese ; whether it be the peculiar skill of the dairy-women in each district, in their respective operations, or whether it be only prejudice, sanctioned by custom, is an object of curiosity, if not of use ; but as butter is an article of more constant indispensable consumption than cheese, it is a fortunate circumstance for the county of Wilts, that the inhabitants of a large district, in that and the adjoining counties, think it a profitable concern to make butter for sale.

A WILTSHIRE RAM.



SECT. II.—SHEEP.

THE sheep stock of this district is an object of the greatest importance. It may, indeed, be called the basis of Wiltshire Down husbandry.

The peculiar aptitude of the soil and climate to sheep, the singular use of sheep-folding on arable land naturally light and loose, the necessity of making sheep the carriers of dung, in situations where the distance from home and the steepness of the hills almost preclude the possibility of carrying it by any other mode, and particularly the advantages that art has given the farmers of this district of getting early grass, by means of their numerous water-meadows, whereby they are enabled to breed lambs both for the supply of their stock, and for the market, are the principal reasons which have contributed to give to Wiltshire the high rank it bears among the sheep-breeding counties.

The following pages respecting the Wiltshire breed of sheep, are entered here nearly verbatim from the Original Report in 1794. At that time the observations applied pretty generally to the county at large; they attach now partially throughout the two districts, and are therefore preserved. Some information respecting the present state of the sheep stock in South Wilts, will be found at the conclusion of this Section.

The number of sheep kept in this district cannot be exactly ascertained; but from the best information that can be collected, it appears that the number of lambs bred yearly is at least 150,000, and that the whole summer stock of sheep, including lambs, is very little, if any, short of 500,000.

Notwith-

Notwithstanding the seeming immensity, it is a fact, that the sheep stock of South Wiltshire has been for many years gradually decreasing, and that it is now less by many thousands than it was fifty years ago. On the sand veins, particularly on the rich parts of them in Pewsey Vale, the introduction of a better mode of husbandry by the abolition of fallows, and the raising green crops, has tended to decrease the summer sheep stock; but as this system enables the occupiers to winter sheep for the down farmers, and that in a much better way than they were heretofore wintered, it may be said to be rather beneficial than injurious to the district.

But on the down part of this district, where the sheep-fold is indispensably necessary to the production of corn, a diminution of the sheep stock is a serious evil. That this diminution has really taken place, and to a great extent, is a fact; but as many of the farmers who see it, and feel the effects of it, are puzzled to account for it, the cause is not very obvious; perhaps, indeed, it may be produced by a combination of causes. There are two that strike every person very forcibly, who has observed the husbandry of the county for the last thirty years, "the pride of keeping fine sheep, and the rage there has been of late years for ploughing up the sheep-downs." The former, by flattering the vanity of a farmer, prevents him from seeing his real interest; and the latter, by putting a temporary supply of money in his pocket, makes it his interest to conceal the future consequences, particularly from his landlord.

Purposes for which Sheep are kept in this District.

The best clue to this enquiry, is an investigation of the purposes for which sheep are kept in this district. The first and principal of these is undoubtedly the dung of the sheep-fold, and the second is the wool. The improvement of the carcass was not heretofore thought a primary object, and perhaps is in some degree incompatible with the great object of this district, viz. the hardiness of the animal, necessary to enable it to get its food on a close fed pasture ; to walk two or three miles for that food, and to carry its dung the same distance back to fold ; and the breeding lambs was looked upon as a necessary consequence, rather than as a primary cause of keeping such flock. A supply of ewe lambs for the keeping up this stock was necessary. The wether lambs lived equally hard with the ewes during the summer, and were sold in the autumn for the wether stock of those that had no convenience of breeding ; and such of the ewes as were thought too old to breed, were sold off for fattening. On this system, the carcass either of the ewe or lamb was very little attended to.

But the practice of the breeders in this district is now almost totally altered. The first and great object at this time is the improvement of the carcass both of the ewe and lamb, and particularly of the latter, and the attention is directed much more to the quality of the lambs they breed than to the quantity.

The pride of having fine lambs, and consequently of having the name of selling them for the highest prices, certainly tends to lessen the stock of breeding ewes, and to exclude old ewes from that stock ; and as
such

such a stock will not live hard enough to keep the Downs close fed, farmers have been induced to break those downs up under an idea of improving their sheep feed.

A great portion of this kind of land (as we have explained) produces at first both corn and grasses in abundance; but being thin and loose in its staple, is soon exhausted with a repetition of crops: the grasses sown soon wear out. The coarse natural grasses, particularly the "black couch," or "couchy bent" (*agrostis stolonifera*), and that in a starved reduced state, take possession of and cover the land, and a young tender-mouthed flock of sheep will rather starve than feed on it.

This evil has grown so serious, that many farmers who have the misfortune to find their downs in this state, have been obliged to drop breeding entirely; and as they must have sheep to dung their land, they keep a flock of wether sheep, which they renew from time to time by buying of their breeding neighbours.

The necessity, therefore, of keeping that kind of sheep that is most proper for the soil and climate of the district, and most suitable to the uses to which they are to be applied in it, is sufficiently obvious; but the question, "Which is the best kind of sheep for Wiltshire Downs?" although it has been long and warmly agitated, has not yet been resolved: experience must and will hereafter decide it. It is not for me to pretend to a decisive opinion on so important a question, while so many intelligent experienced farmers differ so materially upon it; but I will endeavour as impartially as I can, to give the reasons adduced by each party in support of their respective opinions.

The kind of sheep which is chiefly kept in South
Wiltshire,

Wiltshire, is what has been long known in Smithfield market by the name of the Wiltshire-horned sheep : their wool is moderately fine, and particularly useful, being the kind of which the second, or what is called the super broad cloth, from 12s. to 16s. a yard*, is generally made. The fleeces of a flock of Wiltshire ewes usually weigh from two pounds to two pounds and an half each ; seldom higher than three pounds. The value of the wool has been for a few years past from 15d. to 20d. per pound ; of course, the average produce of each fleece, has been about 3s. 6d. The weight of the carcasses of the wethers, when fat, is usually from 65 lbs. to 100 lbs.

It has been said, that horned sheep were not originally the general stock of Wiltshire ; but this is not the object of the present enquiry. It is certain that no man living remembers when they were not the general stock ; and it is as certain, that till within these few years, they were thought to answer the particular purposes of this district better than any other kind.

But the objectors against the present sort of sheep say, that they are much altered from the original kind of Wiltshire horned sheep, by the introduction of new rams ; and that instead of being mended by the cross, they are become, in many respects, much worse for the purposes for which they are kept : the sheep in general were, till lately, certainly smaller than they are now.

The alterations that have taken place have been principally by breeding them longer in their legs, higher and heavier in their fore quarters, perfectly white in their faces and legs ; with Roman noses, full eyes, and large

* In 1810.

open nostrils; wide in their bosoms, and little or no wool on their bellies:—in fact, by making them a much larger handsomer animal.

The opponents of the present kind of sheep say, that those alterations have made them less hardy and worse nurses, and in particular, so very nice in their food, that they will starve on the same kind of land on which the old sort of sheep lived well; and that they are subject to disorders (particularly to the disorder called the goggles) which were not known till this alteration of the stock took place; they also say, that this new kind of sheep being so much nicer in their food, and rejecting the feed of the Downs, on which the chief dependence for sheep food is, have suffered the herbage to grow gradually coarser; and that the farmers, in attempting to remedy this evil, by shortening their stock of sheep, have made it worse; it being a well-known fact, that the closer the Downs are fed, the more stock they will keep.

Under these ideas, many attempts have been lately made to introduce new kinds of sheep, and particularly the South Down sheep from Sussex.

As this sort may not be known to all who read this Survey, it may not be improper to say, that they are a short-legged low sheep, without horns, and generally with black faces and legs; low and light in their fore quarters, but very good in their back and hind quarters; small and light in their heads and necks, and offals in general; full of wool, and that wool commonly very fine. The weight of their fleeces is nearly as much as those of the Wiltshire sheep, but the value is 8d. to 1s. per pound more; the wool being applicable to the uses in which the coarser Spanish kinds are employed, that of making an inferior kind of superfine broad

broad cloth. The carcasses of the wethers usually from 55 to 80 lbs. each.

How far this sort will answer, time and experience must determine. Those who keep them say, that they live so much hardier, and feed so much closer, that they can keep 300 well on the same land that would only keep 200 Wiltshire sheep; that they are more docile, will feed more contentedly, and stay more quietly in the fold; they also say that they are able, by keeping this kind of stock, to breed more lambs; and that the ewes are such good nurses, the lambs will be of equal individual value with the Wiltshire lambs; that the wool, by the improved quality as well as by the increased quantity, will almost double the profit they have hitherto had from Wiltshire sheep; and that by the increased number they keep, they will be better able to dung their arable land: and they see no disadvantage in them, but that the old ewes, when sold off for fattening, will not yield so much individually as the Wiltshire ewes; but then they say, "that they shall have three to sell instead of two; and that the wethers, when fatted, always sell for a halfpenny or near a penny per pound dearer in Smithfield than horned sheep."

In point of proportional beauty, they certainly cannot be compared with a Wiltshire sheep: how far their merits may tend to bring them into general use, time must determine. But an experiment is now making* in many parts of the county, in consequence of the benevolence and public spirit of His Majesty, in procuring rams from Spain, and distributing them by means of the Bath Society, of the Earl of Aylesbury,

* In 1794.

and

and the Marquis of Bath, among other flocks, to ascertain how far the breed of Wiltshire sheep may be restored to those properties which their opponents say they have lost.

The Spanish rams appear to have those properties, or perhaps approach near to what the old Dorsetshire sheep were, before that sort had undergone similar alterations with the flocks of Wiltshire. History tells us, that the present race of fine-woolled sheep in Spain were sent thither from the Cotswold Hills, in Gloucestershire; but this must be a mistake, or else the stock of Cotswold is entirely changed. Their present breed is a large, long-woolled, polled kind of sheep; whereas the Spanish rams which have been imported by the King, are a small, short-woolled, horned sheep: in fact, they resemble the Dorsetshire sheep much in their general appearance, save only, that their horns are more open and thinner than the Dorsetshire sheep now are, and are more like the sheep now bred on Mendip Hills, and which appear to have derived their origin from the old kind of Dorsetshire sheep. The Spanish sheep have the tuft of wool on their foreheads which is common in the Mendip kind; they are a small compact animal, and though much lower in their legs than the present Wiltshire sheep, seem active, and able to walk a long way to fold: they are lighter in their fore quarters and offals in general; wide and good in their hind quarters; well covered with wool on the bellies, and down to the hocks; and therefore (though coming from a hot country) appear hardy, and capable of bearing cold. They appear to carry a much greater weight of wool, in proportion to their size, than Wiltshire sheep; and although they have been some years
in

in England, their wool has been pronounced, by many good judges, to be equal to the immediate growth of Spain.

Disorder called the Goggles.—This disorder, we must observe, has tended more than all other reasons combined, to bring the Wiltshire sheep into discredit.

It is not clearly known when this disorder first made its appearance in Wiltshire, nor is it certain that it is peculiar to this kind of sheep. The symptoms are, that the animal becomes loose in the back-bone, with shakings in his hind quarters, preceded by a continued dropping of the ears.

It was very little noticed in Wiltshire till about 25 years ago; and yet it is certain that a disease, which was undoubtedly the same disorder, though called by another name, was known in Lincolnshire about 60 years ago. By a memorial delivered to the House of Commons in 1755, by the breeders and feeders of sheep in the county of Lincoln, it is stated, "that for ten years then past, a disorder, which they called the rickets, or shaking, had prevailed among their sheep; that it was communicated in the blood by the rams, and would frequently be in the blood twelve months or two years before it was perceivable; but that when once a sheep had this disorder, it never recovered." The disorder called the "rickets" is now prevalent in some parts of Cambridgeshire, with the symptoms above-mentioned.

I am informed that all sorts of sheep are subject to this disorder, though known by various names; and that continuing the same breed, without introducing rams from other flocks (provincially, *breeding in and in*), will produce it.

The reason, perhaps, why this complaint has been lately known as the Wiltshire disorder, is, that most of the Wiltshire wethers are sold off when lambs, and are fattened before they are two years old; and the pushing them with high keep at so early an age, will most assuredly discover the goggles, if they be in the blood.

Many thousands that have been sold, not only from Wilts, but also from Hants and Dorset, have been attacked with this disorder; the sellers have been obliged to stand to the loss, and the sort of sheep has been in consequence brought into discredit. It has been, however, for a long time on the decline; and if care be taken in selecting rams, it will probably soon wear out.

No fair conclusion can ever be made as to the relative merits of the different kinds of sheep, till the contending parties are agreed on the purposes for which such sheep are kept. Many who have argued very violently on the subject have yet to learn, that sheep *bred for fattening*, are *bred to stand still*; sheep for folding are bred to walk. The latter was the great object which the old Wiltshire farmers had in view; the former appears to be, in a great measure, the object of the breeders of the present day. Each party contends that their favourite breed is the most profitable, for the general purposes of Wiltshire Down husbandry.

Conclusion on Sheep Stock.

Since the publication of these facts and opinions relative to Wiltshire sheep, the question respecting the comparative merits of that breed and the South Down, has been brought pretty nearly to a decision. I do not
say

say that it is absolutely determined, because there are yet left, candidates for the original stock of the county. Public opinion, however, seems to have given a decided preference to the South Down; as the number thereof now kept in this district (including the crosses), compared with the Wiltshire horned sheep, bears nearly an inverse ratio with the stock of the two kinds in 1794. The South Downs were introduced into Wiltshire in 1789, by Mr. Mighell, of Kennett: they were afterwards crossed with Wiltshire ewes, and other breeds; but of late years, the pure natives of Sussex have been generally adopted. Perhaps the numerous crosses that were made with South Down sheep, may be traced to the desire of retaining some of the blood of their own breed, rather than to any objection to the new sort introduced; and as the pride of stock had at that time brought a large animal into the common flocks, it could hardly be expected that so great a change in men's minds was to be immediately effected. It has now been proved that the smallness of the animal is one of its great recommendations, in a country where summer food is scarce, and winter food raised with difficulty. The excellence of the wool, which has been increasing in price up to 3s. 6d. per pound, has also tended to recommend South Down sheep to Wiltshire farmers; the fine wool being much sought after, whilst the coarse wools are scarcely saleable at any price. The breed of lambs has been so much increased by this introduction, that I am confidently assured, full one-third more are raised in the county than under the former stock; it is even presumed that at this moment Wiltshire ranks, in point of number of sheep, nearly as high as any breeding county in the kingdom. The crosses of Spanish sheep into various breeds of this kingdom, as alluded

to in the foregoing pages, were not carried to any great extent by landholders in Wiltshire till very recently. Some experiments were made, and so far as related to the improvement of the wool, they were very flattering; but the state of that peninsula not allowing our manufacturers to depend on Spain for the stock of wool hitherto received, many speculative men in this district, as well as in other counties, are now breeding Spanish sheep, as stock for general farming purposes, from the flocks lately imported by His Majesty. The result of the doubts which, 16 years ago, were entertained and expressed respecting the South Downs, makes me cautious of publishing opinions on this new sort of breeding stock. It is certain, the value of the wool will pay for some extraordinary care during the winter months, and particularly at the time when the ewes are yeanning; but it is doubted whether the general habits of Wiltshire farmers will permit them to pay this superior attention. The South Downs, being hardy, able to bear travelling, and excellent nurses, are very likely to continue the favourite stock of the district.

SECT. III.—HORSES.

THE horses used for agriculture in this district, were so generally considered to be improper for the work assigned them, that, in the original publication of the Survey of Wilts, they are only mentioned under the head of "Errors in Stock." In some few instances improvements have been since made, by introducing Suffolk stallions, thereby producing a smaller, more compact animal, and with a quicker step both in the field

field and on the road ; but, unfortunately, the pride of stock still exists in this breed among the Wiltshire farmers ; and the observations entered in the Chapter which forms the " Conclusion" of this district, apply to the present times as well as to the past.

SECT. IV. AND V.—ASSES AND MULES.

NEITHER asses nor mules are used for agricultural purposes in Wiltshire.

SECT. VI.—HOGS.

THE old pig of this district, the large white long eared, when kept to a proper age, well fattened with corn, and its bacon well dried with wood, acquired the character which the county has so long and deservedly maintained for good bacon ; but it must be remarked, that these bacon hogs were one year and a half, and frequently two years old, when killed. Age gave that firmness of flesh so desirous in bacon.

The present fashion of introducing those kind of animals which come early to perfection, has been most singularly successful in improving the breed of pigs. The China pig and black African (or negro) pig, will come to perfection in half the time that the old Wiltshire pigs would do, with much worse, and proportionably less food, of course the former are the most profitable to the breeder ; and in delicacy of flesh, the new kinds are certainly much superior to the old ; but in

their pure state they are much better for pork than bacon. They are too small in their carcasses, and run too much to fat and too little to lean for bacon, and particularly for hams; but a mixture of either of these kinds, and particularly of the negro pig with the large Wiltshire pig, has been found to answer exceedingly well: this cross is now the prevailing pig of this district, and in point of profit is certainly the most advantageous stock. The usual weight of the carcass is from ten to fourteen score; and though perhaps the firmness of the flesh of the old Wiltshire bacon be in a certain degree lessened by this mixture, the delicacy of the flavour of the mixed breed, and above all, the increased profit in keeping them, make ample amends for it. The Wiltshire labourers object to the negro pig from this peculiar circumstance, that the very make and shape of the animal render it unfit for a poor man's family; though the profit on fattening it be greater than the old sort, yet as the hams are usually sold, they complain their stock of bacon increases but slowly, from the shortness of the flitches.

CONCLUSION TO SOUTH-EAST DISTRICT.

IMPROVEMENTS SUGGESTED.

THE apparent errors in the stock and husbandry of South Wiltshire, have been so often mentioned in the course of the foregoing observations, that it is unnecessary to repeat at length the arguments that have been used, to prove that they really are "errors." A brief recital of them will be sufficient.

SECT. I.—ERRORS IN STOCK.

The errors in stock may be reduced to one general cause, viz. "the pride or vanity of possessing large handsome animals."

1st, Error in Sheep Stock.—As to sheep in particular, this pride of stock, however commendable, and however profitable it may be in countries that are adapted to it, does not seem at all suited to the bleak hills of Wiltshire.

"Warmth and shelter are as necessary to produce perfect symmetry in the parts of an animal, as to unfold the wings of a butterfly, or expand the petals of a carnation." Where these requisites to animal perfection cannot be had, it is useless to attempt breeding for beauty.

But it may be asked, whether those requisites cannot be had, and warm sheltered situations be found in Wiltshire. Undoubtedly they may; but not in a sheep-fold on Wiltshire hills, and particularly at that time of the year when the fold is almost invaluable—"the fold of ewes and lambs for a barley crop."

It can never be too often repeated, that so long as South Wiltshire remains a corn country, the sheep-fold must be the sheet-anchor of its husbandry; and until a new method can be found to manure its hill lands equally efficacious with the sheep-fold, breeding sheep, as a science, solely for the beauty of the shape, can never be introduced with success into this district.

2d, Error in Horses.—The pride or vanity of stock has been almost as hurtful to the farmers of this district in the article of horses as in sheep.

In both instances, the attention has been much more directed to get large than useful animals. Large heavy-heeled black horses have long been the fashion, and have almost driven the smart, active, and really useful horses out of the district.

There are, undoubtedly, some situations where the steepness of the hills and the heaviness of the soil require more than ordinary strength; but surely it would be better to add to the number of horses upon particular occasions, than to increase the size, especially as the roads to the market towns are in general very good.

It has been often asserted, that the benefits the Wiltshire farmers derive from their excellent markets, are not commensurate with the expense of keeping fine horses to carry their corn to them.

Great horses not only cost proportionably more at first

first than small ones, but require much more and better food to keep up their flesh ; and the pride of a farmer in buying such horses, is followed by the pride of his carter in keeping them as fat as possible ; and as their food (which in general is barley) is taken from the barn unmeasured, the expense of keeping them is seldom exactly known.

There are many instances, where the expense of keeping up a fine team of horses amounts to nearly the rent of the farm on which they are kept ; and this expense is very seldom counterbalanced by any profit arising from buying them when colts, and selling them at five or six years old to go in stage-waggon, or London drays, although this has been the great pretence for keeping large horses. Hundreds of colts have been bought at thirty guineas a-piece for the chance of selling one now and then for forty-five or fifty, two or three years afterwards, under the idea that they earn their bread during the time the farmers keep them, and the advance in their price is all gain. But this is certainly a mistake : a large horse seldom comes to perfection till six years old ; and during its progress to perfection, it must be nursed and treated tenderly, and favoured in its work, or it will never attain its full size and beauty.

This nursing and tender treatment must be at the expense of the farmer, and the favour of work at the expense of the older horses ; so that the young ones, instead of earning the bread they eat, are eating that which the others earn.

If the farmers in this district were able to breed their own horses, this argument would have less weight ; but the great price at which cart colts have been bought for many years, precludes the possibility of getting much

much by them afterwards : besides, this kind of horse is naturally too heavy, and too slow in its step for the purposes of Wiltshire farming, or perhaps, indeed, for the farm use of any district. In light soils, so much strength is not wanted; in heavy soils, the weight of the animal does injury to the land.

Large heavy-heeled horses are undoubtedly fit for steady heavy drafts on public roads; but for a farmer's use, a smaller and more active kind of horses will not only step quicker, but will bear their work more hours in a day, and will keep up their flesh not only with proportionably less food, but with that of an inferior kind.

3d, Error in Cow Stock.—The cow stock of this district is not numerous enough to be the subject of much animadversion with respect to its breed. The great error is the smallness of the number kept, the rage for *fine sheep* having almost driven the cow stock out of the district.

South Wiltshire farms are not calculated to keep many cows; but more might be kept than there are on many of them, especially on those which have a large portion of down land; and if repeated experience may be relied on, no injury to the sheep stock would accrue from it; and if cows were formerly thought so useful as to be reckoned indispensable on the farms of this district, they must certainly be much more so now, when their produce is worth at least one-third more than it was thirty years ago.

Cows are in fact still absolutely necessary for making manure in the winter, and on farms which have water-meadows, they are useful to eat the after-grass.

Few reasons need be adduced to prove that the most eligible

eligible cow for this district, is that which will *best* bear *hard keeping*, and particularly that kind which is most calculated for wintering in a straw-yard.

The expense of hay, in attempting to keep up the flesh of large handsome cows during the winter, has tended very much to lessen the cow stock of this district.

Errors in Sheep.—The errors in the breed of sheep, and the observations on the improvement of this stock within the last twenty years, have already been stated in Chap. XIV. Sect. 2.

Summary of Errors in Stock.

In summing up the errors in the stock of this district, it is worthy of remark, that the attempts which have been made to improve the breed of sheep, horses, and cows, have uniformly proceeded on the principle of *enlarging the size of the animal*; whereas the only animal in which a real improvement has been made in this district, viz. *the pig*, has been *reduced in its size*, and a kind that will live harder, and come to perfection at an earlier age, has been introduced. This remark is perhaps as applicable to many other counties as to Wiltshire.

SECT. II.—ERRORS IN THE HUSBANDRY OF THE DISTRICT.

THE great errors in the husbandry of this district, have been already noticed to be the sowing more land with corn, and particularly with wheat, than can be properly

properly manured with the stock on the farm ; and the not making proper provision, either by hay or green crops, to winter all the sheep stock at home.

These two errors proceed from one cause, viz. an anxiety in farmers to have a certain number of acres of wheat every year, and frequently without considering whether they have sufficient manure or not, or even whether the land is at all adapted to wheat.

This custom, originating in necessity in common-field husbandry, is too often retained on severally farms. The observation and good sense of farmers may in time alter this mode ; but the temptation of immediate profit is frequently too strong to allow them to look forward to future consequences, and more particularly those who either know or fear that they shall soon quit their farms ; and it is very natural for a man who enters on land exhausted by over-cropping, to leave it in a similar state, unless he is compelled by his agreement to do otherwise. Nothing but leases for certain terms of years, and an obligation to pursue a certain mode of husbandry during the term, can prevent this practice. If a farm is entered on in an exhausted state, the tenant should have an allowance for such bad entry, and be obliged to leave the farm in a good condition at the end of his lease.

Another error in the husbandry of the district is, " the breaking up of the loose black soil of the Downs."

It is not here meant, that no downs should be permitted to be broken up. A farm may, in some instances, have too much down land ; and some part of it, provided the soil is proper, may be broken up to advantage : but it should be always remembered, that a farm of " mere arable land alone" is not calculated for Wiltshire Downs.

It

It may be said, that this is confuted by the plain fact, "that even the sweetest and best pasture lands on the Downs will yield a greater rent, provided tenants are allowed to break them up; and therefore, that such breaking up must be an improvement to an estate." Long experience has shewn, that, though this fact cannot be denied, yet the inference deduced from it is exceedingly fallacious.

The arable land of a Wiltshire Down farm is maintained by the dung of the sheep fed on the sheep down. Deprive this farm of its down, and how is the arable land to be maintained? It may be answered, "by raising artificial grasses on the down land that is broken up." But will such land always bear artificial grasses? Undoubtedly it will, for a time, bear "good crops;" but downs of that description will soon cease to bear any at all: what is then to become of the arable land? Every unbiassed farmer who has known this district, and observed its husbandry for the last 30 years, can answer this question.

A custom of computing the value of the Downs, in their present state, *too low*, and of the arable land which is supported by them, *too high*, has probably given rise to this injurious practice. For example: suppose a farm of 200 acres of arable land, and 200 acres of down, and the rent 300*l.* per annum, viz. 15*s.* for each acre. It is very common, in speaking of such a farm, to say, the arable land is lett at 16*s.* and the down at 4*s.* per acre; when possibly the truth is, that the down is of more intrinsic value than many parts of the arable land, and only appears poor because all its produce is carried off, and no return of manure made to it. An offer of advancing the rent of the down to 8*s.* per acre, is caught at by the landlord as an improvement,

provement, without considering that his arable land, when deprived of the down, will gradually get worse, and the farm in a few years will be worth much less than it was in its former state.

The best farmers fold their sheep on the Downs, from the time the wheat is sown till the weather drives them from the hills; in a mild autumn, sometimes six weeks. This practice should be enforced generally, and the improvement would fully pay the trouble. On all applications from tenants to break up sheep downs, the landlord or steward should have good proof that the farm had too much dung for his usual course of crops, and should require an undertaking that the number of his working stock of sheep, to be folded on the farm, should not be decreased.

This is one striking instance that shews the real value of down land in its proper light: in the parish of Monkton Deverill, a large piece of down land, called Keesley, had for time immemorial been kept and lett for an agistment *sheep sleight*: it has no arable land annexed, and therefore nothing is carried off it, the sheep that feed it being folded on it. The country that surrounds it is, like Wiltshire Downs in general, "about half arable and half down;" and the sheep fed on the latter are folded on the former: but so little is the improvement by keeping any part of this land arable, that every acre of the sheep sleight is lett for nearly as much as an adjoining acre of arable land with an acre of down annexed to it.

SECT. III.—BENEFICIAL PRACTICES.

THE only practices in the husbandry of this district that are likely to be beneficial elsewhere, are those which will apply to similar soils and situations, in other districts, under worse management ; or, in other words, if there be any system of husbandry in this district, which enables tenants to raise a greater amount of valuable produce than can be raised on similar soils and situations in another district, under a different management—that system should be introduced into the latter.

It is a fact, that the hills in Wiltshire are rented remarkably dear, when compared with the high lands of Hampshire, Dorsetshire, and Gloucestershire, even in those parts of the county which are not immediately affected by markets. Those counties were *once* under the same general kind of management as Wiltshire, with respect to the sheep-fold ; and even in many parts of Hampshire and Dorsetshire, there are water-meadows equally good with those of Wilts.

It remains then for us to enquire, what are the customs *once common* to all these counties, but which Wiltshire *alone* still retains ?

The grand custom appears to be, “ *the use of the sheep-fold ;*” and that “ *not merely to keep the sheep from running away in the night, but with a view to manure the land.*”

The “ pride of sheep stock,” which must inevitably tend to the subversion of the sheep-fold, infected those other counties *first* : it had gone very far in Wiltshire when this Survey was originally taken for the Board of Agri-

Agriculture; and those who have attempted to stem the torrent of fashion, by introducing the South Down sheep, deserve the thanks of the land-owners of the county.

Over-ploughing and under-stocking on light loose land, in high exposed situations, which are the natural consequences of keeping flocks for beauty, in countries where they ought to be kept for use, must always produce bad effects.

The water-meadows of Wiltshire, and the neighbouring counties, are a branch of husbandry that can never be too much recommended. In speaking of water-meadows, it has often been objected that *they are local*; and that *there are many parts of the kingdom in which they neither can be made, nor are they necessary if they could be made*. There are undoubtedly *many parts* of the kingdom in which water-meadows *cannot be made*; but it must be allowed, *that there are thousands of situations* where they could be made, in which *they have never been tried*: and as for their use, it may strongly be suspected that those who deny it, have never been in Wiltshire in *the month of April*. Let those who call it in question, point out a substitute on which a farmer can with *equal certainty* depend, for the sustenance of his flock during that *trying month*.

Whatever may be the earliest of the seasons with respect to the springing of either ray-grass or meadow-grass, water-meadows will be a month before either of them. And notwithstanding the great advantages that have been derived from the introduction of green winter crops, such as turnips, rape, cabbages, &c. (advantages to this kingdom almost beyond estimate), yet this may be laid down as a certain maxim, that whether the winter be hard or mild, whether the spring be late
or

or early, Nature will always have, in this climate, an interregnum between the end of one year's food and the beginning of another: a moment's reflection will convince any man, that Nature must unavoidably and constantly leave this chasm in the year's food. Winter, though driven into a small compass, is *still winter*, and *Art alone can expunge it from the calendar*. *Hot-houses and hot-beds* have in a great measure done this for the gardener—*water-meadows*, which are *hot-beds for grass*, will as effectually do it for the farmer. How necessary, therefore, is it, to impress the value of this branch of husbandry on the minds of all the landowners in the kingdom. It is the most valuable, and at the same time the most permanent, of all improvements in husbandry; for it not only improves the land *on which it is made*, without requiring any share of the manure arising from it, but it makes *other land* better by its produce; and it differs in one very grand point from all other improvements, viz. that the carelessness of a tenant cannot materially injure it, and *that time will even make it better*.

NORTH-WEST DISTRICT.

CHAP. I.

GEOGRAPHICAL STATE AND CIRCUMSTANCES.

SECT. I.—CLIMATE.

THE climate of this district is various; and though, in general, milder than that of the high lands in the South-East District, is nevertheless cold, and consequently, unfavourable to the purposes of early spring vegetation, owing, probably, to the cold retentive nature of the under soil of great part of this district.

SECT. II.—SOIL.

THE soil of this district is not so uniform as that of South Wiltshire: it may, nevertheless, be reduced to a few leading particulars; and those, in general, may be better defined by a description of the substrata, than by any peculiar characteristics of the upper stratum.

The under stratum of a large portion of North Wilts, viz. in a direction from Cirencester to Bradford, is a loose irregular mass of flat broken stones, called in the

country, "corn-grate;" the greatest part of the Cotswold Hills, in Gloucestershire, is composed of it, and it runs without interruption through the north-west part of Wiltshire, and terminates at Frome, in Somersetshire. These stones are usually found in horizontal beds, mixed with earth; in some places they are thin enough for slates to cover houses; in others, they are fit for pavement; and in some, they assume the shape and qualities of freestone: but in general, they lie in loose, flat, broken pieces, which are well calculated for building the dry walls so commonly used for fences in Gloucestershire, and many parts of this district.

The top-soil of this "corn-grate" is chiefly a kind of reddish calcareous loam, mixed with irregular flat stones, and is usually called "stonebrash." The quality of this soil varies very much, according to its comparative distance from the rock, and to the absence or presence of an intervening stratum of cold blue clay. This clay is of a marly appearance, but, in general, it is not sufficiently calcareous to be valuable as a manure; and its presence is obvious to every traveller, by its spontaneous production of oak trees; whilst its total absence, or, at least, its lying very deep, is as strongly denoted by the natural and luxuriant growth of beautiful elms. The north-west verge of the county, viz. from the neighbourhood of Cirencester by Malmsbury, and on the west side of the road from London to Bath, may be truly denoted the Cotswold part of Wiltshire: its external appearance, and internal component parts, are nearly the same as the Cotswold Hills, except in those places where the vein of clay lies so near the surface as to make it colder. On account of the thinness and looseness of the soil, this part is usually, and in many instances necessarily, kept in an arable

arable state; whilst the adjoining land, viz. about Chippenham, and from thence southward through Melksham and Trowbridge, which has a greater depth of soil, and lies upon a pure warm rock, without any intervening clay, is capable of grazing the largest oxen, and is perhaps one of the most fertile parts of the county, a vein of gravel, which will be next described, excepted.

This vein of gravel, which is of a most excellent, small, pebbly, shelly sand, and in general covered with a good depth of rich loam, runs in a broken line from Melksham, through Chippenham, to Cricklade; but its greatest extent is from Tytherton, through Christian Malford and Dantzey, to Somerford, and the richest part of it, perhaps, is at or near Dantzey. It is a most excellent substratum, warming and drying the top-soil, and it is only to be lamented that its quantity is so small: it is used for roads and walks, and, when washed and screened, for drains, in the cold clay lands which border upon it.

There are two principal veins of sand in this district; they are in general red; of a sharp, loose, gravelly, texture, and, of course, not so fertile as the tough close lands of South Wiltshire. One of these runs from Redburn, by Seagry, Draycott, and Sutton Benger, to Langley Burrell, near Chippenham; and another begins at the opposite corresponding hill at Charlcot, and runs through Bremhill to Branham. Of this last vein there are two detached masses, at Rowd and Seend to the south; and probably the stratum of sand appearing at different places to the north of it, viz. between Charlcot and Swindon, is part of the same vein. All these detached masses have a mixture of some other soils, and are generally more fertile than the principal

veins. Under the sand land at Swindon lies a singular rock of stone, of a most excellent quality, serving equally, in its different beds, for the purpose of building houses, paving, and covering them.

The greatest part of the residue of the soil of this district, and particularly from Highworth, by Wootton Bassett, to Clack, lies on a hard close rock of a rough irregular kind of bastard limestone, of very little use but for the roads. The soil over this kind of stone is various, but generally cold, owing to its own retentive nature, and to the frequent intervention of a vein of clay.

Bradon Forest (between Cricklade and Malmsbury) is an exception to the whole: it is a cold iron clay to the very surface; so bad, as to be called, by way of distinction, "Bradon land;" and was never so well applied as when in its original state of woodland.

CHAP. II.

STATE OF PROPERTY AND FARMS.

IT has already been observed, that this district was formerly, and at no very remote period, possessed chiefly by great proprietors, who leased it out in small estates for lives renewable; at which time the country in general was in an open common-field state, and most of the lessees lived on their own holdings; but that since that period, many divisions of property had taken place, and freeholders had been created by the dismemberment of manors, and gradual extinction of lifehold tenures, particularly in those parts which have been enclosed and laid down to pasture; that many manors, nevertheless, remain in their original common-field state, and are still granted out on the same lifehold tenures, particularly those in mortmain, belonging to churches, colleges, schools, and other pious foundations; but that, upon the whole, property is much more divided than in the south-east district of the county. And although the present occupation of several parts of the county is in a few hands, particularly some great dairy and grazing farms in the north part; and a few large corn farms in the north-west part, yet a great part of the district may still be said to be much subdivided in its occupation, particularly in the neighbourhood of the manufacturing towns.

CHAP. III.

BUILDINGS.

THE two districts of this county, however dissimilar in soil and situation, and in their present modes of husbandry, appear to have been once, and at no remote period, held by the same tenures, and occupied in the same common-field system; and in the north-west part of the county, where common-fields and lifehold tenures remain, the customs are as nearly similar to those of the south-east district as the difference of the kind of land will allow. It is needless, therefore, after having spoken so fully on the state of farm-houses, and the nature of leases, in that district, to detail it again here, as the few arable farms that are left for a term of years, are usually leased on the same covenants as those in South Wiltshire.

But in the dairy and grazing parts of this district, which being the best land, were probably enclosed first, there are few traces of lifehold tenure remaining; and the land is, in general, divided into large farms, with the house in the most convenient part of the estate, and perhaps no one thing contributes so much to the excellence of the dairy system of this district, as the convenient situation of the houses in general.

North Wiltshire dairy farms are usually very well accommodated with buildings, particularly with milk-houses and cheese-lofts. The latter are frequently on a
very

very large scale, as the North Wiltshire cheese being sold chiefly to factors, who contract for it by the year, requires to be longer kept, than in counties where it is sold to chance customers. The cow-sheds, calf-houses, and milking-yards, are also in general on a much superior plan to those in many other counties; and nothing encourages a landlord to make these conveniences, so much as the remarkably neat style in which they are almost uniformly kept throughout this district.

CHAP. IV.

OCCUPATION.

NORTH WILTSHIRE is for the most part enclosed; there are a few common-fields, and some commons to be seen, but no extensive tracts of either.

The stonebrash land on the north-west verge is chiefly arable: most of the residue is grass land, and a great proportion of it is applied to the dairy, particularly to the making of cheese. But this disposition of the land does not appear to be very ancient; the straightness of the hedges, the uniformity of the enclosures, and the evident traces of the plough, are convincing proofs that a considerable part of it was originally in an open common-field arable state; not excepting some of the very best meadows on the fertile banks of the Avon.

But the dairy, which has from time to time made great inroads on the arable lands of the district, has also, in its turn, lost ground, particularly in the most fertile parts, by the rage for grazing: the rich and the lazy find this a pleasant resource, and the dairy, though much more profitable, is obliged to give way to it.

Even those who are possessed of dairy farms, can seldom resist a propensity of applying a little of their best land to the purpose of grazing their dry cows, and of fattening a few sheep in winter, or taking in store sheep to winter for the down farmers.

It

It may, therefore, be fairly asserted, that notwithstanding the great predilection of this district to the dairy, and the peculiar excellence of the dairy-women in the making of cheese, at least one-fourth part of the pasture land is applied to grazing : the impropriety of this innovation will be noticed in a subsequent Chapter.

Some of the dairy farms have a small quantity of arable land annexed to them, others have none. The propriety of this appendage will also be enquired into in another part of the Work.

LEASES.

Usual Terms of Leases.—Leases are granted for various terms of years in this district—sometimes for 21 years ; but a 14 years term seems to be the most general.

The landlord is usually bound to repair the buildings, and the tenant the fences.

The landlord puts the gates in repair, and the tenant being allowed rough timber, usually keeps them so. In some cases, a better mode perhaps is adopted : the tenant is allowed annually as many new gates as the farm is supposed to require, which he must put up and keep in repair. In modern lettings, however, the tenant does all repairs of his farm, on being allowed timber, brick, tile, lime, and stone.

The tenant, in general, is not allowed to sell hay or straw, but is obliged to expend the whole on the premises.

SCOTS FARMERS.

Within these few years several of the great landholders in Wiltshire have introduced into this district
Scots

Scots farmers, who, from a supposed superior skill in the science of agriculture, have leases for 21 years, with scarcely any restrictions as to husbandry. The ancient pastures are allowed to be broken up, buildings are erected for their accommodation at a low rate of interest, and a degree of countenance and patronage given to them above the other tenants of the day. These men give nominally a large rent for their farms; but as their maxim is to pay neither repairs, tithes, or parochial taxes of any description (these dues and services being all included in the rent received by the landlord), I have strong doubts whether the advantages held out to the land-owners will be ultimately any increase of net cash into their pockets.

In strong loamy countries, or in rich sands, I am aware much profit may be made by an economical system of husbandry in the tillage; but the practice of the Scots farmers not embracing sheep, or water-meadows, will never make them rich on the down farms of Wiltshire; and if the downs be broken up by the tenants, who have no stock to maintain them, the land and the farmer will soon come to poverty together.

The entries are various, some at Michaelmas, but more generally at Lady-day. On the corn farms, and even on those dairy farms that have arable land annexed to them, the quitting tenant takes an off-going crop of corn, and the farms are quitted and entered upon in many instances in the same manner as in the other district.

CHAP. V.

IMPLEMENTS.

THIS district of Wiltshire not being in general a corn country, no uniform system in the ploughs, carts, and other implements of husbandry; is to be met with in it; the most common are those already described as in use in South-east Wiltshire; but as the soils and situations are more various than in that district, some new ploughs have been introduced, and particularly a lighter kind of two-wheeled plough, and in some instances the swing plough. But no new kind seems as yet to be the favourite of the ploughmen: until that object can be accomplished, it is useless to introduce new machines in agriculture.

In the stiff wet lands, a foot-plough is generally used on the fallows, as a large clod of earth will stop a wheel, or throw out the plough; but on the wheat-stubble a wheel-plough is preferred.

CHAP. VI.
ENCLOSING.

SECT. I.—CASES BY ACT OF PARLIAMENT.

ALTHOUGH a great part of this district appears to have been at no very remote period in a commonable state, and though the improvement upon the lands newly enclosed have been very great, yet the progress of enclosures has been slow for the last fifty years. The reason seems to have been the very great difficulty and expense of making new roads in a country naturally wet and deep, and where the old public roads were till within a few years almost impassable; but this reason having nearly ceased, by the introduction of several new turnpike roads in the district, and by the spirit which now generally prevails in it, of making good the approaches to them from the interior villages, it is to be hoped that so great an advantage to the county and community, as that of enclosing and cultivating the commonable lands, will no longer be neglected.

The commons which lie in a line from Westbury towards Cricklade, are detached and dispersed in numerous pieces, and belong to a variety of parishes; but the whole content of them is supposed to be somewhat more than 3000 acres*.

* Several enclosures of common-fields, and some of common pasture, have been completed since 1794, when this remark was written; but the tract of land here mentioned, remains pretty nearly the same as at that period.

In their present state, they make a very trifling return, not only on account of the wet rotten condition in which they lie every winter, but from the very unprofitable kind of stock which is usually kept upon them; but were they enclosed and drained, they would become as good pasture ground as any of the surrounding enclosures. The improvements by enclosing them might fairly be stated from 15s. to 20s. per acre. But enclosures of commons of this description frequently improve not only the commons themselves, but also the adjoining enclosures, by preventing the occupiers from continually mowing the latter and carrying off the hay.

Very great improvements might also be made in this district, by enclosing the common-fields, particularly those in the deep vein of land about Broadtown, Elcombe, &c.* and which require draining. Many of these fields would be more valuable if converted into pasture land, than in their present arable state. Even in the north-west part of this district, where the land is apparently the driest, the common-fields are so much in need of draining, that few of them are safe for sheep in the autumn. This can only be effected by enclosure, and a greater proof of the necessity of it cannot be adduced.

The open lands of this district, small as they may appear when compared with the enclosed part, yet being capable of such vast improvement by dividing and draining, hold out a source of future benefit to the landholders, of many thousands per annum, for the neglect of which few reasons can be assigned.

* These are lately enclosed.

There are numerous instances in which common-field arable land lets for less than half the price of the enclosed arable, and the commons are very seldom reckoned worth any thing, in valuing an estate that has a right thereon.

SECT. II.—EFFECTS ON POPULATION.

WITH respect to the decrease of population already felt in consequence of former enclosures, or to be apprehended from future ones, it has been observed in our remarks respecting the South-east district of the county, that the extinction of lifehold tenures, which has been gradually taking place for the last century, tends undoubtedly to decrease the number of farmers; and that, though this event may be sometimes hastened by enclosures, yet that it may, and frequently does take place without them. But in this part of the county, where land is in general so valuable, the effect of consolidating small farms will not be visible, as in South Wiltshire. The vast improvements made on the lands in consequence of enclosure, particularly by draining, and by the laying down to pasture such land as was too wet for arable, has increased the rental of the country so much, that there will probably be always land sufficient for the occupation of the inhabitants of it.

It has been already stated, that there are a great number of small freeholders in this part of the county; and as these divisions of property have generally happened in the enclosed parts, it has tended to retain those

those inhabitants who would have been otherwise driven out by the extinction of lifehold tenures.

In several parts of the district that are still in a common-field state, the landholders would be much greater gainers by an enclosure, than it is possible they can in many parts of the South-east district of the county; as much of the land, when enclosed, may be applied to the purposes of a small farm, without the necessity of keeping a flock of sheep to manure it; viz. by keeping that part which will be necessary to remain in arable, on a turnip system, either for feeding cattle or sheep, or for wintering sheep for the Down farmers; by laying down the wet parts to grass, either for the dairy or for feeding; and by applying the sand lands, on a garden system, to raising esculent vegetables: while on the thinner and poorer parts of the north-west parts of the county, which must necessarily continue in an arable state, the improvement to be obtained from enclosures must be derived from putting the occupation into fewer hands, and making farms of such a size as can be managed to the greatest advantage of the tenant, the landlord, and the community.

With respect to the decrease of labourers in this part of the county, there is very little to be apprehended from enclosures. So little manual labour is done to the unenclosed land in its present state, that every alteration that has improvement for its object, must increase manual labour, and, of course, the number of labourers. The fencing and draining the land, and making and keeping good roads, in a country naturally so deep and wet, will be a perpetual source of employ for labourers.

These are the improvements which have already so wonderfully increased the value of the land in this district.] N trict;

strict; and as so much remains to be done, there will probably be in future more complaint for want of labourers, than for want of work to employ them in, especially in the neighbourhood of the manufacturing towns.

CHAP. VII.

ARABLE LAND.

SECT. I.—TILLAGE.

THE north-west part or verge of the county (which we have already distinguished by the name of the Cotswold part of Wilts, from its similarity to the soil of the Cotswold Hills, in Gloucestershire), may be said to be the only entire tract of land in this district which is kept in an arable state.

I have already stated the soil to be almost uniformly stonebrash ; but it is very differently managed in different parts of it, and but in few instances on the best plan.

It has been often said, that men are more apt to be led by custom and imitation than by reason and observation : it is particularly the case in part of North Wiltshire. When this district was in open common-fields (at no very distant period), the same system of sheep-folding was pursued, and perhaps very properly, as is still used on South Wiltshire Downs ; and the same system is still pursued at this time, when the greatest part of the county is enclosed, and where they have neither down land nor water-meadow, and very little pasture land, and frequently upon land not proper, nor at all times safe, for sheep ; and the same kind of sheep which, in South Wilts, are kept to walk five

or six miles a day, are here kept (comparatively speaking) to stand still.

About Hullavington and Grettleton, where the husbandry seems to be the best in the district, the general series of crop is what is usually called the six-field system : 1. Wheat ; 2. Oats ; 3. Turnips ; 4. Barley ; 5. Clover, mown ; 6. Clover, fed, and summer-fallowed for wheat.

This course is certainly particularly applicable to the sheep-fold system, in those parts of this district where the land is naturally too light, and too weak to bear a frequent repetition of wheat ; but it certainly merits enquiry, whether the sheep-fold system, which at first originated in necessity, when the country was in a common-field state, is the best to be pursued at this time, and especially on those parts that are cold and wet, and subject to land springs ? and whether, instead of improving, it does not tend to impoverish a country, which has neither down nor water-meadow, by keeping more land in tillage for the food of sheep, than they can support by their dung ; by the exclusion of cow stock, to make room for sheep ; and by the necessity of raising a great quantity of oats for the support of the extraordinary number of horses necessary to manage land under this system ; and which crop of oats, besides the expense of raising it, must certainly, when immediately following wheat, make the land foul for the whole round.

Barley has been found to be the least profitable crop in this district: beans, pease, vetches, and a few oats, have been substituted. Black corn, beans, and pease, refresh the land by dropping their leaves, and grasses come and stand better after them than after barley, in the strong lands of North Wilts.

Turnips.

Turnips.—As to green crops, it has been already stated that turnips make a regular part of this six-field system; but a good clean crop of turnips cannot be well expected on land which has successively borne a crop of wheat and a crop of oats, especially where almost the whole dependence for dung is on the sheep-fold. If the turnip crop is light, as is frequently and must necessarily be the case on land in this impoverished state, the dung left by feeding them off with sheep, is also light, the succeeding barley crop is light, and the clover frequently fails entirely. These are the defects, even of the best system, at present in this district. An attempt will afterwards be made to point out a better mode of managing this land.

Sainfoin.—The sainfoin might be cultivated to great advantage in many of the driest parts of this district, the soil being peculiarly proper for it: it is, indeed, frequently sown, but often in soils that are too cold and too wet for it, where it is soon overpowered by the couch-grass. The rage for sowing as many acres of corn as possible, without regard being had to the probability of a good crop, is a great injury to the husbandry of this part of the district, not only in this article, but in many others.

In the vale part of the district, particularly on the gravel and some part of the sand spits, the land is of that rich quality, that it bears corn every year, and that of almost every kind; but in the deep cold lands over the bastard limestone rock, of which the quantity, though dispersed, is very large in this district, the land is of that cold retentive nature, that it is almost impossible to say what it is fit for. It generally bears a good crop of wheat; it is entirely improper for barley, and

seldom proper for beans. Under a common-field system, it is usually of very little value; and where it has been enclosed, it has not improved equal to the expectation of the owners, and it does not run kindly to grass: perhaps the latter defect may be owing to its not having been sufficiently drained.

A real permanent improvement on this kind of land, is an object well worth the attention of those to whom it belongs. This kind of land usually has a year's fallow for wheat, during which time it is ploughed as often as possible, if the weather be dry; but ploughing it in the wet, does it great injury.

SECT. II.—SEED-TIME AND CORN HARVEST.

THERE are perhaps no two counties which vary more in their seed-time and harvest, than the different parts of this district.

The north-west, or driest part of the stonebrash land, is sown and harvested as early as the Downs of South Wiltshire, while the low cold parts are frequently a month behind in both seasons.

In a district of such variety, it is impossible to fix any particular period at which operations, in themselves uncertain, begin or end, in a country where no regular system is pursued.

CHAP. VIII.

GRASS LAND.

THE proportion of grass land to arable, in this district, is very great.

SECT. I.—PRODUCE.

THE difficulty of tilling and cropping land naturally wet and heavy, and its aptitude to run quickly to grass, have occasioned, from time to time, great quantities of it to be laid down to pasture; and the advance in the rent of the land when so applied, arising in a great degree from the excellence and increasing fame of the cheese made in this district, has contributed to keep it in that state, and daily to increase its quantity.

The cheese of this district was many years sold in the London market by the name of Gloucester cheese; but it is now perfectly well known by the name of "North Wiltshire cheese." It was at first, doubtless, an imitation, and perhaps an humble one, of that made in the Vale of Gloucester; but it is now allowed by many to be at least equal, if not superior, to the cheese of the favourite district of Gloucestershire, the hundred of Berkley. Mr. Marshall, who has so fully examined and so ably described the present state of
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the dairy in both districts, leans strongly to that opinion.

Although this district varies as much apparently in soil and situation as almost any two counties can do, the predilection to the dairy, and particularly to the making of cheese, is amazingly strong in every part of it; and it is very surprising, that the cheese produced on soils and situations totally dissimilar, should frequently be found, when under skilful management, equally good: a strong proof that, although soil and situation may in some measure contribute to the excellence of that necessary article, yet art contributes more; or, in other words, the dairy-women who happen to be situated in parts unfavourable to the making of cheese, have, by attention and observation, found out the causes of, and remedies for, the faults peculiar to the cheese made in their own dairies; and this attention has been strongly excited by the rivalry necessarily produced in a district, anxious at first to vie with their neighbours in the Vale of Gloucester, and then to keep up the superiority which North Wiltshire cheese had by degrees acquired.

SECT. II.—MANAGEMENT OF GRASS LAND.

THE management of grass land has been entirely changed within a few years. It was formerly thought a sufficient manure for the grass land, to fodder the cattle upon it with the hay which grew upon the estate; but in deep wet lands this practice did more harm than good; the treading of the cattle poaching the ground, and making it wetter, when its great fault was that of being
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being too wet already. This has induced many land-owners to build stalls and sheds for wintering cattle, not only fat cattle, but dairy cows; whereby the occupiers are enabled to take their cattle off the land in November or December, or sooner, if the season require it, and to keep them off until the grass is fit for them in the spring; and as straw is necessary for this management, a little arable land is requisite to such a farm.

The dung made by such stall foddering is spread on the land in different modes, and at various seasons; but the most approved practice is, to carry it out as soon as the cattle are gone from the stalls, and to lay it in heaps near the spot where it is to be used, and to spread it in July or August. It is reckoned the best husbandry to put it on the land that has been lately mown, soon after the hay is cleared off.

As few farmers have dung enough to cover all their grass land oftener than once in eight or ten years, the loss of so small a part of the after-grass is immaterial, and is fully compensated by the certain gain of a plentiful bite in September or October.

To this husbandry, with the addition of draining, where necessary (particularly with covered drains), winter-haining, and early mowing, and the custom, now become general where it is practicable, of feeding and mowing every piece of land alternately, all the great improvements which of late have been made in the grass land of this district are to be attributed. The grand object in these improvements is, to get an early bite for the cattle in the spring, and thereby, in fact, to shorten the winter—a matter of serious consequence to a dairy farmer.

SECT. III.—HAY-HARVEST.

IN the management of the hay-harvest, this district certainly excels: the dairy farmers and graziers, in particular, are much more attentive to the quality than to the quantity of their hay; and as they make a point of haining up their meadows as early as possible, they are of course able to mow early in the summer. It is common to see grass mown, not only before it is in blossom, but even before it is all in ear; and by these means, fat cattle are more frequently fed with hay alone in North Wiltshire, than in any other part of the kingdom. By the same means the dairymen are enabled to keep up the milk of those cows that calve early, which would otherwise shrink before the springing of the grass, and not fully recover during the summer.

The advantage they derive from an early after-grass, and from the continuance of that grass till late in the autumn, is an adequate compensation for the loss they sustain in the quantity of their hay crop.

CHAP. IX.

GARDENS AND ORCHARDS.

GARDENS are not laid out in North Wilts upon so large a scale as in the South-east district, because the soil is not so natural for the purpose. Near Wootton Bassett, some land is thus applied, and the cultivators supply the markets of Cricklade, Cirencester, &c.

Orchards are more frequent as an appendage to the farm-houses ; but no cider is made for sale within the district.

CHAP. X.

WOODS AND PLANTATIONS.

SEE the Conclusion of the Survey.

[The information on this subject was put in Chap. X, of the S. W. District, by order of the Board, as it could not well be divided, and appeared best in its usual place in the Survey.]

CHAP. XI.

WASTE LANDS.

ALTHOUGH the greatest part of this district appears to be enclosed, and it contains no very extensive tracts of waste land, yet there are numerous small commons in almost every part of it, in a very neglected unimproved state: there are also many parishes in which there are still common-fields, and those very badly managed.

The greater part of the common-fields lie on the stonebrash land on the north-west side of the county, and others in the deep strong land from Calne, by Broadtown, towards Highworth; but the commons lie chiefly in a north-east line from Westbury to Cricklade, through the centre of the richest land in the district.

There are a few heaths in this district, which might be improved by ploughing; but as lime, chalk, and other alterative manures which are properly adapted to them, can but rarely be procured very near them, most of the heaths would pay better for planting, more particularly those in the neighbourhood of Bradon Forest.

Application to Parliament for Enclosure Acts are not made so frequently as in South Wilts: this is perhaps attributable to the circumstance of the common-
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able land, within the respective parishes, being too inconsiderable to clear the expense attendant on it.

The commons consist chiefly of marshy pastures near the public roads.

CHAP. XII.

IMPROVEMENTS.

SECT. I.—DRAINING.

THE use of covered drains has been long known in this part of the country ; they have been made in many different modes, with turf, with wood, and with stone ; but chiefly with the latter, on account of the facility of getting stones, there being very few parts of the district in which they cannot be found within a moderate distance.

Stone Drains.—The stone of the corn-grate rock is of a peculiarly favourable flat shape for under-drains, and no land requires it more than the vein of cold clay which so frequently accompanies this rock. Much of this kind of land has been drained, and much remains yet to be done. The drains made with this stone have been in general about ten or twelve inches wide, with perpendicular sides. In some cases, the stones are so placed as to leave a water-course at bottom, by setting two flat stones triangularly to meet at the points ; in others, and perhaps a better way, by covering the bottom with a flat stone, and then putting three other flat stones upright, leaving the water to find its own way between them : in both cases, filling up the residue of the drain to the top, or near the top, with loose stones.

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But the fault in the greatest part of the under-drains that have been made, is, that they are not deep enough to answer the purpose of draining the ground effectually; the object of them having been oftener directed to drain the water from the surface (where, perhaps, it does in fact but little injury), instead of draining off the land-springs which are in, or run upon, the understratum, and which are poison to vegetation. This error in draining has admitted with the surface-water the running of the soil, which in a few years chokes up the under-ground drains, and leaves the land worse than ever. The top of the stones should not be within two or three feet of the surface.

In some few parts of this district where stones are scarce, and those not of a shape well adapted to the purpose, particularly about Steeple Aston, much ingenuity is shewn in different methods of draining which have been introduced.

Turf Drains.—In some instances, land has been drained to the depth of three or four feet, by first digging a spit of earth out, and then boring out the ground with a three-inch borer, so as to form a pipe of the depth required, and only three inches wide. If the soil be loose, they have drawn in small bushes, so as to keep it from running together; but if it be strong and tough, and the pipe be not required to be very deep, they have left it open, and turned down the first spit upon the shoulders of the pipe, with the grass side underneath. In other cases, where only small round stones could be found, and those not plentifully, they have made the drain taper, from nine inches at top to nothing at the bottom, and perhaps three feet deep;

deep; and filled it up by dropping first the smallest stones, and then the large ones, nearly to the top, and have finished it by placing a thin turf on the stones.

Gravel Drains.—Where gravel is more plentiful than stones, it has been found, if screened and washed, to answer the purposes of draining very well.

In all cases the general opinion seems to be, that those drains have lasted longest, which have the narrowest water-way left at the bottom, as in such, the force of the water is sufficient to cleanse any little obstacles that may chance to get in.

Mole Plough—The mole plough has been used very successfully in great part of this district, as a temporary draining of wet lands: the effect will sometimes last seven years, and as the mode is simple and cheap, it is likely to become more general.

SECT. II.—PARING AND BURNING.

PARING and burning is not practised systematically in many parts of the district. In the cold lands of Bradon Forest, it is generally adopted for breaking up old ley-ground which had been formerly worn out with crops, and was laid down to recruit; this land is again exhausted with crops, and then left to rest for a series of years.

The example of Devon and Cornwall is quoted for this husbandry; but it should be remembered, that in these counties the land is not only peculiarly proper for this husbandry, but burn-baking alone is seldom depended

depended upon to fertilize the land. In some parts lime, in others sea-sand, and in all parts all the stall-dung and compost they can get, either on their own farms, or from the roads, lanes, and wastes, is also used; and after all, those who are called good farmers make a point of not taking more corn crops* than will leave the land in perfect health to bear grass—a very different system from that practised in Wiltshire, and many other parts of England.

In most other parts of this district, burn-beaking, though occasionally used, is seldom looked upon as good husbandry; but only as a short way of getting a few crops, without regard to the future value of the land. But paring without burning is very frequently used instead of ploughing, and particularly as a winter-fallow of wheat stubbs for a barley crop, on the cold deep lands that will not bear winter treading. This answers the purpose of turning the weeds to rot quite as cheap and equally well with ploughing; and by keeping out the wet, which would lie and soak the land all the winter, makes the land work much freer and better in the spring for barley.

SECT. III.—MANURES.

It has been already said, that notwithstanding the difference in the soil and the situation of the two districts of this county, the sheep-fold is the depending manure of both. In the South-east or Down district,

* In Cornwall, three crops are sometimes taken after this dressing: but the best farmers take only two.

it is undoubtedly right ; and it is equally proper on the loose parts of the stonebrash soil on the north-west vefge of the county, and, in fact, on all the soils that are too light and loose, and require treading to make them heavier and closer : but there are too many instances in this district, where, though the clay vein lies near the surface, and the land is not only cold and heavy, but also full of springs, a flock of sheep is kept, to the great disadvantage of the tenant.

Land of this description, if properly drained, generally runs kindly to grass ; and where that is the case, it will certainly pay better, particularly for a dairy, than in an arable state : even parts of it converted into pasture would, by augmenting the number of cattle, increase the quantity of manure for the rest.

Probability of Marl.—In this part of the country, a permanent manure should by all means be sought for : no great improvements will or can be made till such be found. Neither chalk nor lime can be procured, but it is possible that marl may : stonebrash land, on a similar rock to that of this district, is seldom without a vein of marl under it. It has been frequently said, that there is marl about Grittleton, and its neighbourhood, but that it is not sufficiently calcareous to be valuable. The Cotswold farmers, particularly about North Leach, maintained the same argument 20 years ago, and for the same reason, viz. that they had not given it a fair trial : since that period they have found out the use of it, and have dug thousands of loads.

The vein has, in many instances, a promising appearance ; but so little is it attended to, that there have been some instances where the cold clay vein has been used instead of it, and which has done harm instead of

good, and consequently has brought marl, which was not at all used, into discredit. This is an object well worthy of the investigation of the landholders of North Wiltshire. This improvement, if it could be effected, would not only double the value of their land, but would enable them to practise that kind of convertible husbandry, which is peculiarly adapted to the soil and country.

This system is successfully practised on a soil nearly similar, about Radstock, in Somersetshire, where the land, after being exhausted with crops, and laid down to grass, will so far recover itself by marling, as to be worth immediately from 30s. to 40s. an acre, for at least 20 years after, when it will again bear a repetition of the same manure with the same effect.

The kinds of manure used on the arable land in other parts of this district, are variable, but stall-dung is the chief dependence, except where a situation near a great town gives an opportunity of purchasing other manures.

In some cases, where a portion of arable land is annexed to a grass farm, it is too common to put a great proportion of the dung on the arable land; and restrictions are sometimes thought necessary to prevent it, and to enforce the purchasing of manure for that part of the farm.

Soap-Ashes.—In the neighbourhood of towns, soap ashes are frequently used; they are particularly beneficial to rushy wet land that has been lately drained. About four waggon-loads to an acre is the usual quantity, and they are generally put on in the autumn.

Lime—Mixed with earth, is frequently used on

dry upland pastures ; but compost of earth taken from the sides of the fields, and mixed with dung, lime, ashes, &c. as is the custom in some counties, particularly in Devonshire, are not much used in this district—not so much, perhaps, as they ought to be. Coal-ashes are in so great demand for young clover, as seldom to be used on grass land.

Soot—Is generally bought at a great price, for a spring dressing for weak crops of wheat.

Wood-Ashes—Are, in general, too dear to be used as a manure till the soap-boilers have done with them.

SECT. IV.—IRRIGATION.

Water-Meadows.

THE system of watering meadows, though it is carried to great perfection in South Wilts, has not been generally adopted in the north part of the county. There is not certainly the same occasion for water-meadows in the latter district ; but though they may not be indispensably necessary, it does not follow that their introduction would not be useful.

In the north-west or arable part of this district, where water-meadows are most desirable, the springs are in general too small, and the land too absorbent, to be applied to that purpose : where they can be made, they certainly ought not to be neglected. There are doubtless several situations in the district, in which
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good water-meadows might be made, though perhaps to no very great extent.

On the banks of the Avon, and on some of the principal branches of it that lead to the Thames, water-meadows, though very practicable, are not much in request, "the land being supposed to be" good enough already. But though it may not perhaps be easy to shew, that watering those rich meadows would improve their quality, it certainly would be of some advantage to a dairy farmer to make the winter a month shorter, and to be able to turn his cows into a flush of grass early in April, instead of waiting till May; especially in a country where, on account of the great demand for, and high price of, winter veal, most of the calves are sold off fat by the beginning of April; and if at that period the cows have no food but hay, unless that hay be very good, they frequently shrink their milk, and never fully recover it during the summer. A few of the dairy farmers have seen this advantage in its true light, and have made water-meadows, particularly near Somerford; and though the expense must have been at least 12*l.* per acre, the improvement pays exceedingly good interest for it. The very advantage of such land requiring no manure, but affording manure for other land, is an object of more consequence than is generally imagined.

Objections against Water-Meadows refuted.—In a country like North Wiltshire, where grass land is abundant, and hay, of course, not so great an object as it is in South Wiltshire, it has been frequently remarked, that one of the chief advantages of a water-meadow, viz. "that of producing a large and almost certain

certain crop of hay," is lost; because, in such situations, hay of a much better quality than what usually grows in water-meadows is to be procured at a reasonable price. To this I answer, that the coarseness usually attributed to water-mead grass is, in general, not so much the fault of the herbage as the covetousness of the tenant, by letting it stand to increase the quantity till it is too ripe.

If water-mead grass be cut young, the hay is not only as good as that of dry meadow, but cows are more fond of it, on account of its peculiar softness; than of the hard bent hay that is produced on upland meadows, and it will produce more milk; though I will allow that, on that very account, it is not so saleable, nor perhaps so proper for horses. But perhaps it would not be difficult to prove that water-meadows in many counties, and particularly those on dairy farms, will answer a better end to be summer fed than to be mown at all.

The advantage of the first flush of grass a month before the upland meadows will produce it, is already pointed out, and is obvious to every one: when this is eaten up, the land intended for summer feeding will be ready to take stock. The water may then be thrown over the water-meadows for a fortnight, and a new supply of grass produced that will again take the cows, by the time they have eaten off the first shoot of the summer pastures. The meadows may then be fed during the summer, and the quantity of grass they will produce, and the particular milky nature of that grass, is inconceivable to those who have not tried it, especially during a dry summer.

In case of a wet summer, the meadows will not want watering after the second time, and, indeed, the dryer

they can be kept, the better; but if the summer is dry, the water should be thrown over them whenever they appear to want it, and the cattle taken out until the ground is dry and firm again. Two days' watering, and, in very hot weather, even a few hours, will be sufficient; always remembering to stop it before the water begins to leave a scum on the land.

The summer feeding of the water-meadows has been very successfully practised by a few farmers in this district: it has been reduced to a system in the neighbourhood of Hungerford, and applied to breeding lambs, and fatting them for the London market, in way that is worthy of imitation in those counties where the sheep-fold is not indispensably necessary.

CHAP. XIII.**EMBANKMENTS.**

THE same remark applies to this district as to South Wiltshire.

CHAP. XIV.

LIVE STOCK.

SECT. I.—CATTLE.

AS the dairy cows of this district form so great a part of its depending stock, it is an essential object of enquiry, which is the most proper kind of cows for the particular purpose for which they are principally kept, viz. the making of cheese?

Cow Stock.—It does not appear at this time, what was the original kind of cow kept in this district; probably the old Gloucestershire cow, a sort now almost extinct; or, perhaps, as is now the case in Somersetshire, a mixture of all kinds: but the universal rage for upwards of 20 years past has been for the long-horned, or, as they are called, the “North Country” cows; and at this time, perhaps, nine-tenths of the dairies in this district are entirely of that kind. The reason assigned for the general introduction of this sort is, the nearness of their situation to the North Country breeders, where they can get any number they want, at any time, cheaper than they can rear them in a country where land is in general too good, and rented too dear for that purpose: and especially as, in consequence of the great demand for the Bath and London markets, calves will pay better to be sold for veal than

to be kept for stock. But perhaps the real reason is, that "pride of stock," which, operating like the pride of sheep and horses in South Wiltshire, has gradually led the farmers to an emulation in beauty and size more than in usefulness and profit, and which pride the breeders have not been wanting in using every artifice to create and promote.

Two ostensible reasons are given by the dairy farmers for continuing this kind of stock, viz. that they can make more cheese from each cow; and that these cows will yield more, when turned off to be fatted, than any other sort.

The quantities of cheese produced from each cow in this district, is certainly, as Mr. Marshall justly observes, amazingly greater than is common in any other cheese-making country; sometimes as high as $4\frac{1}{2}$ cwt. or near 5 cwt. per cow, seldom lower than 3 cwt.: perhaps $3\frac{1}{2}$ cwt. is a good average, in a good cheese-making year, for every cow that calves in proper time. But the second reason, viz. that this kind of cows produce more than any other kind when sold for fattening, is an answer to the first, for this simple cause, that they are bigger. If, therefore, it can be proved, as the opposers of this breed say it easily can, that four cows of a smaller size will, with the same food, produce as much or more cheese than three of the large long-horned kind, it will be easy to shew, that the smaller kind will be the most eligible stock; first, because, in case of the death of an animal, the loss is not so serious; and principally, because the weight of a large animal is an essential injury to land, whose great fault is its being already too cold and wet. Besides, it is allowed, even by the advocates for this kind of cow, that they do not come to perfection until they are at least two years older than

than cows of a smaller kind; and that whatever may be the comparative merits of the female, the oxen are certainly not only the ugliest, but the worst and least saleable of all kinds bred in this kingdom.

These are undoubtedly two objections against a dairyman breeding his own stock out of the long-horned kind of cows; and yet no intelligent man will deny the use, and indeed the necessity, of breeding his own stock, where it can be possibly effected, as no cows ever settle so well in a dairy as those actually bred on it.

Many attempts have been made lately to supplant the long-horned cows, by introducing the Devonshire kind into this district. The comparative merits of the two species is very warmly contested: the Devonshire cow undoubtedly gets ripe at an earlier age than the long-horned cow, and being a smaller animal, is less liable to tread and poach out the wet lands; it is disposed to get fat at an earlier age, and when fat, is of a greater comparative value to the butcher than almost any other kind, and is much better calculated than the long-horned cow for those who breed for the purpose of fattening.

How far these properties, particularly that remarkable disposition of getting fat at an early age, may answer the general purpose of a dairy where milk alone is required, remains to be proved. It is possible that each of the two kinds of cows may be most proper for the particular purposes for which they are kept; but the supporters of the Devonshire cows say, that they are equally good milkers with the long-horned species; and yet that they are so much smaller, and eat so much less food, that three of these may be kept on the same land as will keep two long-horned cows. If this can be proved, the question is decided at once.

There

There seems to be an increasing opinion of the merits of the Devonshire kind; and perhaps if half so much care and attention had been paid to the breed of the Devonshire cows, as has been bestowed on the long-horned kind, they might have been still more improved, and the comparison might have been much more in their favour.

Whatever may be the real comparative merits of the two kinds of cows for the dairy, there is not a doubt but the Devonshire kind are the most proper for fattening; and as to the oxen bred from the two kinds, it would be injustice to the Devonshire oxen even to make a comparison between them.

Oxen.—There are some oxen kept for tillage in this district, but they are not in general use; and notwithstanding oxen are common on similar soils in Gloucestershire, horses are by far the greatest favourites here. The reasons given for not using oxen are, that in the north-west part of the county, where the land is chiefly arable, the present system of sheep-folding requires all the grass for the sheep stock, and, of course, there is but little room for oxen.

In the interior part of the county, where the quantity of arable land is comparatively small, there are few farmers who do not wish to keep two, three, or four horses, and those are usually sufficient for their ploughing. If they kept mares for this purpose, and bred colts, the expense of keeping them would not be all loss; but the comparative profit of many branches of agriculture, not only in Wiltshire, but in all other counties, is seldom enquired into. Men, in general, are fond of walking in the way in which their fathers walked safely; and nothing tends to strengthen their attach-

attachment to it more than the accidental fall of an enterprising mind, who attempts to deviate from it.

Breeding oxen is not the fashion in Wiltshire; and where they are not bred, it is in vain to think of introducing them generally. Why so few are bred in the county, and particularly in those parts of this district where grass land abounds, is a question not easily answered.

The dairymen say, that the advantages which their situation gives them of sending their veal to London and Bath markets, makes it more their interest to fat their calves than to wean them for stock; but the opponents of the long-horned cows say, that the oxen are generally so ugly, and the heifers frequently such bad milkers, that the former are never certain of breeding such as they would wish to keep; and therefore, they prefer buying cows (of which they can have a choice) to breeding them, and to use horses for the plough instead of oxen.

As this point has been long obstinately contested, and as the best farmers and most intelligent men in the district have not yet decided thereon, it is probable that each party may be in a certain degree right, and therefore neither absolutely wrong.

SECT. II.—SHEEP.

MANY sheep are bred in this district; some on the folding system, and some purposely for fattening. The number folded has certainly decreased, and perhaps a still greater decrease will and ought to take place, on land which may be appropriated to a better purpose.

The

The decrease in the number of sheep bred in many parts of the kingdom, and the vast increase in the consumption of mutton, seems a paradox, which can be accounted for in no other way than by supposing, what is certainly the fact, that the animal is now killed at an earlier age than it was formerly. Some years ago, sheep were not considered eatable till they were four, five, or six years old; at this day, three-fourths of them are killed at or before they arrive at two years old: the old sorts of sheep did not come early enough to perfection to do this, and new sorts were necessary. This laid the foundation of that spirit of sheep-breeding, which has been carried to a pitch, particularly in Leicestershire, almost beyond credibility; and this spirit (though sometimes wrongly applied) has enabled the kingdom to furnish a supply for the increasing demand for mutton.

We observed, in our description of South-east Wiltshire, that for the two distinct purposes of folding and fattening, two kinds of sheep are necessary, viz. a kind to walk, and a kind to stand still: the latter, which come early to perfection, are the best calculated for this district, where in some parts the land is adapted to a convertible system of corn and grass, and in others there is a proper mixture of arable and pasture land; and this practice of breeding sheep purposely for fattening at an early age, seems to gain ground, more especially since the Leicestershire sheep, which are peculiarly adapted to that purpose, have been introduced.

There are yet left in North Wilts a few flocks of the native Wiltshire horned sheep, possessing qualities of perfection both for folding and fattening. They stand short in the leg, with wool under their bellies; are wide

wide and heavy in their hind quarters, light in the fore quarters and in all their offal, with the Roman nose, and quick piercing eyes. These are in the hands of a few farmers near Broad Hinton. The much reputed Mr. Westcar has for many years bought ewes from these flocks, and fattened them with their lambs in Buckinghamshire.

SECT. III.—PIGS.

Pigs are considered a necessary appendage to every dairy farm, and great numbers are reared with the whey and offal of the dairy; there are also many fattened; barley-meal, mixed with whey, is the general fattening food; pease are not so much used as formerly.

The general kind of pig is a mixture of the long-eared white with the black, African, or negro pig, which cross has been found to be a very great improvement.

SECT. IV.—STOCK FATTED FOR SALE.

THERE are great numbers both of cattle and sheep fattened in this district. The cattle consist chiefly of long-horned cows turned off from the dairies, and of oxen bought from different countries, particularly from Devonshire; they are usually bought in very early in the spring, so as, if possible, to be finished with grass; but the largest and latest are taken into
the

the stalls, and finished with dry meat, chiefly hay. The improved breed of Herefordshire cattle has of late been much in repute with North Wiltshire graziers ; they are nearly as fine in the bone as the Devon, and generally increase in size after being a short time in these rich pastures.

Corn is but little in use for fattening cattle in this district : of late, potatoes have been introduced for winter fattening, dressed with steam, and mixed with cut hay or straw, as is mentioned in the description of the South-east District, and found to answer.

Bath takes off many of the fat cattle of this district ; many are sold at Salisbury market, for the consumption of Hants and the adjoining counties ; but the greatest number go to Smithfield.

The sheep fattened in this district are usually bought in at the Michaelmas fairs : the principal object is, to fat them during the winter on land that will not bear the treading of heavy cattle. Sometimes ewes with lamb are bought, with the intention of fattening both ewe and lamb in the succeeding summer.

Both cattle and sheep are fattened not only by professed graziers, but frequently by the dairymen, and sometimes to the injury of the dairy, particularly when sheep, by being kept on too late in the spring, injure the hay crop, or prevent the cows from being turned early to grass.

PART THIRD.

[In the following Chapters it is no longer necessary to keep the Agricultural Districts separate, the remarks being applicable to both.]

CHAP. XV.

RURAL ECONOMY.

SECT. I.—LABOUR.

THE price of labour in agriculture varies considerably in different parts of this county, and is chiefly affected by proximity to, or distance from, the manufacturing towns.

In a great part of South Wiltshire, where the inhabitants are very little influenced by the manufacturers, the prices of labourers in husbandry are nearly uniform; but these prices have been gradually on the advance.

Thirty years ago the common winter price was 10*d.* per day; from that it gradually rose to 18*d.* per day, which now may be called the general price, though in many instances it has risen to 20*d.* per day.

The price of labour is usually the same throughout the year, with the exception of harvest-time, both for hay and corn, when an advance is given, either in money, or by an addition in victuals and drink.

If the advance be in money, it is usually 3*s.* per week, and commonly for six or seven weeks; but this allowance

allowance varies both in price and continuance, according to the plenty of labourers and the length of the harvest.

In the corn district, the resident labourers are seldom numerous enough to get in the harvest. "Taskers," or "labourers by compact;" from the more populous parts of the county, as from Somersetshire and other neighbouring counties, cut the wheat by the acre. The price is about 8s. to 10s. per acre in good seasons, with an allowance of small-beer, and a supper once, twice, or oftener, per week. The wives and children of the resident labourers assist in this operation, while the resident labourers themselves are fully employed in securing the corn.

In cutting the Lent corn few "taskers" are employed, the resident labourers being generally sufficient. The price is seldom higher than 2s. per acre for mowing, and 1s. 3d. for forking, &c.; the raking being done by women and children by the day. The price of mowing field-grass is 2s. 6d. per acre; meadow grass 4s. to 5s. per acre. The prices of women's labour are usually 10d. per day during hay and corn harvest, and 8d. per day during the rest of the year; and generally without the addition of beer, except in harvest, when small-beer is commonly allowed them.

The hours at which labour commences and ceases, vary but little in the two districts. In winter the labourers work, of course, from day-light till dark; in summer, usually from six to six, except in hay-making and harvest, when they are expected to work early and late.

But the hours of rest are very various. In some parts half an hour is allowed for breakfast, and an hour for dinner; in others, an hour for each meal; and

in a few, one only meal of an hour, is allowed (from eleven to twelve) during November, December, and January.

The ploughmen go out at eight o'clock, and return at four, except in times of emergency. The distance of the lands of a Wiltshire farm from home, prevents the custom that is adopted in some counties, of making two journeys a day, and dining between them.

Wiltshire labourers in general are strong and robust, and not deficient in expertness in what they undertake; in some branches (hurdle and hedge-making, for instance), very ingenious; but there is a remarkable slowness in the step, not only of the shepherds, whose laziness is proverbial, but also particularly of the ploughmen, and which they also teach their horses, that is noticed by every person who has seen the labourers of other counties, particularly of Norfolk. The common step of a ploughman and his horses in the last-mentioned county, is often three miles and an half in an hour. In South Wiltshire frequently little more than two

If the quick step of the Norfolk ploughman proceeds from the dryness and cleanness of the sands of that county, it is possible that the dirtiness, and in particular the "clingingness," if I may be allowed to use the word, of the Wiltshire white lands, may tend to slacken the step of the Wiltshire ploughman; but on whatever sort of soil this slow step was learnt, it certainly is now practised equally on all.

Fariners are greater sufferers than they imagine by this habitual indolence of their workmen; and it is not only at plough, but in all other kinds of employ, that this indolence is visible; it seems instinctive in the whole district, even in the children.

SECT. II.—PRICE OF PROVISIONS.

THE price of provisions in Wiltshire, more particularly in the South-east part of the county, when compared to the other Western counties, may be said to be high.

As the South-east or down part of the county produces very few articles of human food except wheat, this is the only article which can be said to be cheap in that district*; and so great an influence have the Bath and London markets on the price of other commodities which are raised in the north and western parts of the county, that butchers'-meat, butter, and cheese, more especially the two former are usually at least ten per cent. dearer on an average at Sarum, than at Shepton-Mallet in Somersetshire, and sometimes even 20 per cent. higher than at Exeter, and as these causes are likely to be permanent, the effects will most probably be the same.

The certain demand for, and consequently the high prices of the produce of this county, is undoubtedly, as has been before observed, an advantage to the landholders; but the same circumstance may be fairly deemed a disadvantage to them, so far as regards the state of the labourers. Although the wages of labourers have been considerably increased within these few years, yet they are now barely sufficient for their subsistence; and a few days illness will bring them to the parish.

The parish-rates are of course very high, and daily

* As this observation has been generally true, the present high price of wheat does not induce me to alter the report.

increasing; and if the system newly adopted in the clothing manufactories, of spinning the wool by machines, which formerly was done by women and children, become universal, the price of labour must still be very considerably advanced.

SECT. III.—FUEL.

ANOTHER great cause of the distress of the poor in many parts of this county, and particularly on the Downs, is the scarcity of fuel.

Coals are advanced very considerably, and let the price of carriage be never so much reduced, by good roads, or even by canals, coals must still be dear in many parts of the county.

Wood is the natural, and should be the depending fuel, of a great part of Wiltshire.

How necessary, therefore, is it for those who have woods, to preserve them; and for those who have none, to plant some. But as this must necessarily be a work of time, it is useful to hint, that as a quicker remedy for this alarming inconvenience, a few acres of furze might be preserved from the plough in those parishes where it already grows, and sown in those where there is none*. It may be sown either alone or with a crop of barley, white oats, or buck-wheat, and if preserved from cattle, will be fit to cut in three or four years. It likes a dry situation, and if there be a depth of soil, it does not signify how poor it is. This might

* Furze is a very tender plant when young, and should therefore be protected from cattle. It should not be sown till late in April, or early in May.

be sold for fuel, to those who could afford to buy it, and given instead of parish relief, to those who could not. Those who have hearts to feel for the distresses of the poor, would by this expedient gratify their humanity; and those (if such there be) who feel only for the preservation of their hedges, would find this a more effectual way to prevent wood-stealing, than a whip or a prison.

It is a melancholy fact, that without any particular acts of oppression on the part of the farmers, or of dissoluteness on the part of the poor, the labourers of many parts of this county, and of the South-east District in particular, may be truly said to be at this time in a wretched condition. The dearness of provisions, the scarcity of fuel, and above all, the failure of spinning-work for the women and children, have put it almost out of the power of the village poor to live by their industry, and have unfortunately broken that independent spirit, which in a very peculiar degree formerly kept the Wiltshire labourers from the parish books. The farmers complain, and with reason, that the labourers do less work than formerly, when in fact the labourers are not able to work as they did at a time when they lived better.

There is no necessity of heightening this melancholy picture; every landholder of the county knows it too well, and the resident magistrates in particular have it daily in their view; and to their credit be it spoken, the landholders are using every exertion, by premiums, bounties, and other indulgences, to introduce new kinds of employ for the poor, to supply the loss of spinning wool, or to induce the manufacturers still to put out their wool, by offering bounties equal to what can be saved by spinning it at home by machines.

CHAP. XVI.

POLITICAL ECONOMY,
AS CONNECTED WITH AGRICULTURE.

SECT. I.—ROADS.

THERE are few counties in this kingdom in which turnpike-roads are so numerous as in Wiltshire. The great thoroughfares from the east and south parts of the kingdom, and particularly from London to Bath and Bristol, and many other parts of the West of England, passing through the county.

There are no less than ten principal turnpike-roads which pass through Wiltshire, viz. three from London to Bath and Bristol; two from Oxford to Bath and Bristol; three through Salisbury into Dorset, Somerset, Devon, and Cornwall; one from Portsmouth and Southampton to Bath; and one from Salisbury through Devizes to Oxford; besides a number of intersecting turnpike-roads in almost every part of the county; and to the credit of the county it may be remarked, that there are few parts of the kingdom in which the system of making and keeping turnpike-roads in repair, is so well known and practised.

The private roads, like those of all other parts of the kingdom, are good or bad, in proportion to the plenty or scarcity of materials. Till lately, those in the north part of the county were bad to a proverb; but the introduction of several new turnpike-roads in that district, has not only stimulated the inhabitants to make good their approaches to them, but has also enabled them to fetch materials for that purpose.

SECT. II.—CANALS.

THE canals in this county are:—1. The Thames and Severn Canal, which passes through only a small part of the extreme south boundary of Wiltshire.—2. The Kennet and Avon Canal, from the river Kennet at Newbury, in Berks, to the river Avon at Bath, in Somersetshire, passing through the very heart of the county, by the towns of Devizes and Bradford.—3. The Wilts and Berks Canal, which enters the county from Berkshire, near South Marston; passes by Swinden and Wootton Bassett, and with branches to Chippenham and Calne, extends southwards to Melksham, near which town it unites with the Kennet and Avon.

As these canals terminate westwardly in the coal counties of Somerset, and in the river Severn, opposite the collieries in Wales, great part of the county of Wilts is supplied with coal at all seasons of the year, and although the price be occasionally high, yet the certainty of obtaining them for money is desirable.

SECT. III.—MANUFACTURES.

THE extent of manufactures in the county of Wilts is very great; but the woollen manufactory is by far the most general.

Salisbury manufactures great quantities of flannels and fancy woollens, and has a considerable manufactory of cutlery and steel goods, perhaps for excellence of workmanship superior to any in the kingdom. Wilton, a large manufactory of carpets and fancy woollens.

Devizes

Devizes a considerable manufactory chiefly of fancy woollens. Bradford, Trowbridge, Warminster, Westbury, and all the adjacent towns and villages, from Chippenham to Heytesbury inclusive, carry on most extensive woollen manufactories, principally of superfine broad cloths, kerseymeres and fancy cloths.

At Mere and its neighbourhood there is a manufactory of linen, chiefly dowlas and bed-ticks. At Aldbourn, a manufactory of cotton goods, chiefly tustians and thicksets. At Swindon and its neighbourhood, a considerable manufactory of gloves. There is indeed scarcely a town in the county that has not a manufacture of some kind or other.

The vast population of the county of Wilts, occasioned by its various and extensive manufactories, and the daily increase of population of Bath and Bristol, occasions a never-failing demand for all the productions of the land of this county.

The wheat, and in particular the barley, the cheese and butter, and every other necessary of human food, are sure to find a market.

These are undoubtedly advantages, and very great ones, to the landholders of this county in general ; but perhaps more to the landholders at a few miles distance from the seat of manufactures, than to those immediately on the spot.

It seems to be allowed, even by the manufacturers themselves, that although the nation derives an inestimable advantage from manufacture, in a general and commercial point of view, and though the landholders throughout the kingdom have been able to advance the rents of their lands very considerably in consequence of an increased consumption of its produce, yet the manufactures are not always blessings to the landed interest

terest of the county where they are immediately situated.

The advantages arising to the landed interest in the immediate neighbourhood of large manufactories are, an increased demand, and of course an increased price for the produce of the land; but this extends only to a few articles of daily indispensable consumption, such as milk, butter, poultry, hay, straw, &c. In the heavy necessities of life, such as wheat, barley, oats, cheese, butchers'-meat, &c. the advantages are shared by the landholders at a distance.

The disadvantages to the landholders on the spot, are an increased population, and that of the most undesirable kind, viz. labouring poor, who in times of a quick trade raise the price of labour almost beyond the reach of a farmer; and when trade in general, or that single branch to which they have been brought up, fails, fall a burden on the poor-rates, greater than the land is well able to bear. In the woollen manufactories of this district, this has long been the complaint of the landholders; and yet the manufacturers have hitherto made them in some degree a compensation by the employ that they have furnished in spinning-work to the women and children of the labourers in agriculture.

But unfortunately for the landholders, even this compensation seems likely soon to be at an end, by the general introduction of machines to supply the place of manual labour, whereby all those parts of the manufactory that have been done in the country villages, will be now done at the immediate residence of the manufacturers. The consequence to the landholders we have already observed. The consequences to the manufacturers are not yet known. How far the general introduction of machines may affect this part of the kingdom, or
the

the kingdom at large, by making those manufactories moveable that have hitherto been fixtures, time must determine.

In some parishes near Stourton and Maiden Bradley, the poor have latterly been supplied with flax from the neighbouring manufactories in Dorsetshire, and with silk from the throwsters at Bruton, in Somersetshire. The spinning of silk is an admirable employment for the poor of any village. Women and girls work at home, and children are sent to spin at a school appointed for the purpose, under the management of a mistress, with the occasional attendance of the manufacturer. The raw material is weighed out, and the work weighed back again, deducting for waste from the spinning-money; and the great value of the article requiring care to secure their weekly earnings, has taught the cottagers of these villages a degree of carefulness in general, which was before but little known to them. The money stopt in their earnings, is, by the indulgence of the throwster, once a year, at their time of holiday (commonly Easter or Whitsuntide), divided equally amongst the constant spinners of every parish, thereby exciting in them a stimulus to future exertions.

SECT. IV.—THE POOR.

SEE Poor-rates, Labour, Manufactures, &c. &c.

SECT.

SECT. V.—POPULATION.

THE following Tables are extracted from a book entitled, "Enumeration," printed in pursuance of an Act 41 Geo. III. for taking an account of the Population of Great Britain, and the increase or diminution thereof.

Hundred,

Hundred, &c. Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
	Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trades, Manufactures, or Handicraft.	All other Persons not comprised in the two preceding Classes.	
Alderbury	78	98	1	205	225	356	7	67	480
parish	22	22	2	70	59	82	—	47	129
liberty	40	40	3	108	113	54	9	158	221
parish	31	39	—	85	94	36	8	135	179
Dean, West	29	30	3	78	70	38	12	78	148
Grimstead, West	85	91	3	213	209	163	21	238	422
ditto East	58	60	7	197	176	62	30	252	373
Idmington	113	111	5	223	245	49	41	378	468
Laverstock and Ford	46	45	3	110	122	176	33	23	232
Pitton and Farley	26	31	—	57	63	48	11	61	120
Plaitford	45	45	—	83	106	56	7	126	189
Winterbourne, Dansey	26	34	—	72	64	66	8	62	186
ditto Earls	140	142	4	325	359	112	372	210	694
ditto Gunner									
Winterslow, West									
ditto									
	739	788	31	1836	1905	1298	569	1835	3741

Amesbury

Allington	-	-	15	15	-	37	38	26	19	30	75
Amesbury	-	parish	166	168	15	943	978	440	238	43	721
Boscombe	-	township	28	22	2	54	49	60	10	83	103
Bulford	-	parish	53	55	1	107	121	93	27	108	228
Cholderton	-	ditto	35	37	2	65	62	89	18	10	127
Durrford	-	ditto	87	87	4	199	200	280	93	21	399
Durrington	-	ditto	69	75	4	166	173	98	33	208	339
Figheldean	-	ditto	78	83	-	233	194	240	47	80	367
Hinton, Broad	-	liberty	75	75	1	181	225	57	5	344	406
Kingston Deverill	-	parish	54	60	1	141	151	270	21	1	292
Ludgarshall	-	township	109	107	22	223	248	394	30	47	471
Milston and Bregmis	-	parish	23	33	1	72	67	45	3	91	139
Newton Tony	-	ditto	53	60	2	141	145	95	29	162	286
Shinfield	-	ditto	28	30	1	80	75	110	33	12	155
Tidworth, North	-	ditto	55	73	1	94	146	240	13	-	240
West Wellow	-	ditto	54	54	4	163	182	71	63	211	345
Wokingham	-	ditto	60	65	2	127	127	52	17	185	254
			1042	1099	63	2426	2521	2760	1504	1596	4947
Bradford											
Broughton Giffard	-	parish	114	114	1	282	331	188	413	12	613
Chatfield, Great, and Cottles	-	ditto	10	12	-	31	32	-	-	-	63
Monkton Farley	-	ditto	58	60	9	122	142	39	13	212	264
Wingfield	-	ditto	54	55	-	140	150	203	61	96	290
			236	241	10	575	655	430	477	260	1230

Hundred,

Hundred, &c.	Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handi- craft.	All other Per- sons not com- prised in the two preceding Classes.	
Branch & Dole	Barwick St. James	41	45	2	132	94	56	12	158	296
	Fisherton Anger	189	201	9	367	498	13	197	655	865
	Fuglestone St. Peter	111	118	—	280	310	50	57	483	590
	Langford, Little	5	7	—	15	10	11	—	14	25
	Steeple	114	121	4	267	356	151	49	323	523
	Maddington	69	69	—	164	163	275	48	4	327
	Newton, South	110	122	—	246	305	108	11	422	541
	Orcheston St. Mary	24	28	—	53	73	133	—	—	133
	Sherrington	29	31	1	66	68	76	—	—	134
	Newton, North	76	79	2	105	154	189	57	23	269
	Shrewton	46	51	4	116	117	77	76	80	233
	Stapleford	57	62	1	154	173	250	18	77	327
	Tilscend	80	85	—	157	189	67	17	260	346
	Whishford	—	—	—	—	—	—	—	—	—
	Wilton, Eoulbridge,	944	407	6	1022	1123	11	400	1833	2144
	and D'champton	68	68	3	158	194	28	15	4	352
	Wily	48	64	—	192	134	72	9	175	256
	Winterbourne Stoke	—	—	—	—	—	—	—	—	—
		1411	1558	32	3416	3875	1567	1866	2511	7591

POPULATION.

225

WILTS.]	Calne		parish	29	31	1	34	74	20	10	198	188
				10	12	—	33	36	8	33	18	48
	Blackland	-	ditto	755	852	96	1717	2080	700	1077	1990	3767
	Calne	-	town	4	4	—	15	6	6	4	11	21
	Calstone	Wilmington	-	60	65	1	145	159	179	27	98	304
	Cherhill	-	parish	71	77	3	169	197	205	19	142	366
	Compton Bassett	-	ditto	40	60	—	142	145	284	3	—	287
	Hedington	-	ditto	51	53	—	115	119	228	4	3	294
	Yatesbury	-	ditto	1020	1154	31	2409	2776	1790	286	4389	5185
	Barford St. Martin	-	parish	91	93	2	210	240	35	47	368	450
	Baverstock	-	ditto	15	20	1	62	58	57	3	60	150
	Bramahov	-	ditto	42	42	1	95	92	182	5	—	187
	Britford	-	ditto	125	156	—	332	343	198	77	410	675
	Burcombe, South	-	ditto	54	57	2	123	130	77	102	74	259
	Coombe Bassett	-	ditto	61	66	2	134	137	170	37	64	271
	Fovant	-	ditto	100	102	5	237	277	119	55	940	514
	Hamham, West	-	ditto	40	40	1	81	105	102	7	77	186
	Hornington	-	ditto	29	29	1	67	81	100	7	41	148
	Neithor Hampton	-	ditto	23	23	—	85	82	80	5	102	167
	Odstock	-	ditto	26	24	2	66	52	33	5	80	118
	Straford Toney	-	ditto	30	30	1	58	61	56	2	20	119
	Sutton Mandeville	-	ditto	51	54	2	116	136	95	15	142	252
	Whitchbury	-	ditto	23	27	—	60	72	45	6	81	132
				710	777	20	1726	1866	1929	373	1569	3598

Hundred,

POPULATION.

Hundred, &c. Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
	Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manufactures, or Handicraft.	All other Persons not comprised in the two preceding Classes.	
Chalk	53	38	4	101	116	140	7	70	217
	71	75	—	174	183	323	6	28	357
	68	60	1	164	156	264	16	40	390
	124	162	2	290	335	168	56	401	625
	49	58	3	111	114	52	18	155	225
	4	7	—	22	20	—	—	29	42
	78	100	1	250	243	242	8	243	493
	52	53	—	116	122	45	40	153	238
	499	553	11	1228	1289	1234	151	1119	2517
	27	33	—	25	78	27	4	62	103
Chippenham	3	3	—	9	5	14	—	—	14
	84	84	2	151	180	92	21	38	331
	52	54	—	113	124	93	26	118	327
	210	241	1	570	595	140	115	910	1165
	239	284	8	620	683	868	317	18	1308
	111	129	5	271	296	87	118	362	567
	667	857	16	1557	1809	297	1416	1633	3366
	150	179	14	348	345	60	137	476	693
	27	33	—	25	78	27	4	62	103
	3	3	—	9	5	14	—	—	14

Chippen-

POPULATION.

Chippenham, continued	town	458	509	24	1134	1268	520	717	1163	2402
	parish	33	33	—	68	81	18	11	120	149
	ditto	9	10	2	55	50	10	8	42	53
	ditto	4	4	—	3	9	6	4	2	12
	ditto	173	200	5	412	489	69	545	237	901
	ditto	47	47	4	108	113	102	32	97	221
	town	142	158	5	685	723	108	131	43	1408
	parish	65	84	—	159	174	226	6	99	333
	ditto	65	65	—	35	30	—	—	—	65
	ditto	34	34	1	47	40	30	4	53	87
	ditto	52	52	—	145	159	69	29	215	504
	ditto	25	26	1	68	71	4	3	132	139
	ditto	189	189	8	430	462	156	105	631	892
	ditto	17	19	—	46	54	96	5	—	160
	ditto	28	26	1	63	56	43	28	24	134
	ditto	33	33	6	93	87	53	15	112	180
	ditto	72	72	1	155	149	115	11	176	304
	ditto	75	73	2	163	185	51	31	14	353
		2362	3499	106	7313	8395	3387	3827	6815	15,908
Damerham, North	parish	183	190	2	430	508	869	79	—	988
	ditto	73	73	—	169	171	264	47	29	360
	ditto	78	95	5	178	180	204	43	112	358
	ditto	72	53	4	179	192	79	55	—	371
	ditto	61	76	4	166	172	328	10	—	333
		467	527	15	1122	1223	1744	233	141	2345

Hundred,

POPULATION.

Hundred, &c.	Parish, Township, or Extra-parochial Place.	Houses.			Persons.		Occupations.				Total of Persons.					
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Persons not comprised in the two preceding Classes.							
Damerham, South	Compton Chamberlain parish	48	67	3	136	147	239	13	26	283						
	- ditto	73	92	3	196	198	79	15	300		394					
		121	159	6	332	345	318	33	326			677				
Downton	Bishop's Fonthill	39	41	—	93	101	90	2	1	194						
	- ditto	87	130	—	274	161	122	10	403		535					
	Stone	50	54	—	110	111	57	6	158			221				
	Bodenham and Nunton	509	509	15	1134	1292	370	177	1859				2436			
	- ditto	175	186	1	400	393	100	71	622					793		
	Downton	139	167	2	418	435	128	166	559						853	
	Hindon	7	7	—	20	21	13	1	23							41
	Knayle, East	1006	1094	18	2449	2614	880	433	3630							
- ditto																
Standlinch																

929

Hundred,

Hundred, &c.	Parish, Township, or Extra-parochial Place.	Houses.			Persons.		Occupations.				Total of Persons.
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Persons not comprised in the two preceding Classes.		
Framfield	Langford	32	37	—	37	89	148	13	25	186	
	White	182	193	7	456	421	725	120	32	877	
		214	230	7	553	510	873	133	57	1063	
Heytesbury	Boyton and Corton	41	67	4	112	136	213	30	5	248	
	Brixton Deverill	31	31	—	74	70	36	3	1	144	
	Hill	23	32	—	62	84	146	—	—	146	
	Chiltem All Saints	64	72	—	145	169	299	39	46	314	
	St. Mary	32	36	1	69	86	35	12	108	155	
	Codford St. Mary	31	—	—	82	105	—	—	—	187	
	St. Peter, with } Ashton	71	82	—	179	214	73	29	5	393	
	Heytesbury	196	221	14	488	584	155	611	206	1072	
	Horningsham	100	230	5	481	549	555	418	57	1030	
	Imber	35	39	2	121	120	186	5	50	241	
	Knook	30	42	—	87	107	50	69	75	194	
	Orcheston St. George	30	34	3	73	87	73	—	86	160	
	Upton Lovell	57	49	1	115	127	180	57	5	242	
		821	935	30	2,088	2,438	1931	1273	644	4526	

Highworth,

POPULATION.

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	1722	1799	63	4539	5048	6245	650	2687	9587
Highworth, - parish	164	175	8	364	400	458	85	221	764
Cricklade, & Blunsdon St. Andrew - ditto	8	13	-	30	35	45	-	30	65
Staple - Broad	91	94	-	186	210	280	45	121	386
Castle Eaton - parish	94	52	1	133	162	46	5	244	595
Cricklade St. Mary - ditto	84	87	5	171	205	68	63	245	876
St. Sampson - ditto	114	201	16	428	529	759	108	90	957
Key - ditto	15	21	1	62	62	124	-	-	194
Hamington - ditto	53	60	3	179	184	240	5	118	983
Highworth - township	251	900	3	676	817	544	166	783	1483
Inglesham - parish	18	30	1	46	43	45	-	44	89
Lexton - ditto	70	83	3	172	177	179	28	137	349
Lough - ditto	35	43	-	84	90	174	-	-	174
Liddard Millicent - ditto	64	64	1	141	159	289	7	4	300
Marston Meysey - ditto	35	38	3	91	94	142	2	41	185
South - ditto	40	45	-	116	136	150	1	101	252
Poulton - parish	58	58	1	148	158	262	19	25	806
Purton - ditto	271	272	3	701	766	1412	45	10	1467
Rodburn Cheney - ditto	85	103	4	209	242	442	9	-	451
Sevenhampton - ditto	40	48	2	94	93	94	11	82	187
Shorncott - parish	2	2	1	6	8	14	-	-	14
Somerford Keynes - ditto	43	55	3	98	105	98	11	94	203
Stanton Fitzwarren - ditto	30	32	1	91	90	120	3	58	181
Stratton St. Margarets - ditto	117	134	4	313	283	310	37	249	596
	1722	1999	63	4539	5048	6245	650	2687	9587

Hundred,

Hundred, &c.	Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Persons not comprised in the two preceding Classes.	
Kingsbridge	Chisleton	171	186	6	433	471	191	46	667	904
	Cliffe Pipard	115	125	2	310	314	180	36	458	624
	Killmarton	134	137	—	336	381	691	26	—	717
	Liddington	51	66	—	151	186	200	9	198	337
	Lydiard Tregoze	72	102	1	284	294	364	14	550	578
	Lynneham	157	163	3	426	407	208	173	452	833
	Swindon	244	260	4	555	643	140	260	608	1198
	Takenham	93	95	—	58	66	5	—	—	124
	Wanborough	155	170	4	378	415	377	159	257	793
	Wootton Bassett	279	296	15	596	648	39	61	1144	1244
		1401	1530	35	3527	3825	2345	784	4264	7352

Kingsbridge.

Hundred, &c. Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
	Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly in Trade, Manu- factures, or Ham- dicraft.	All other Per- sons not com- prised in the two preceding Classes.	
Malsbury, continued	21	88	1	69	72	93	7	41	141
Draycott Cerne	9	10	1	24	26	25	2	23	50
Foxley	24	29	1	70	73	35	4	104	143
Garsdon	64	71	3	144	142	201	21	64	286
Hankerton	66	79	—	184	185	332	17	—	369
Hullavington	67	67	—	194	206	29	9	372	400
Kemble and Ewen	45	45	2	117	135	75	14	163	252
Lea and Claverton	198	233	9	448	579	47	83	897	1027
Malsbury	18	20	4	103	93	25	11	75	97
Milborne	25	42	—	45	49	50	—	44	94
Newnton, Long	20	24	—	165	198	277	18	108	363
Norton	75	75	3	60	75	5	—	130	135
Oakey	25	25	1	54	54	68	5	35	108
Poole	30	22	3	114	119	49	17	167	233
Redborne	35	47	2	125	130	13	74	271	358
Seagry	75	75	2	125	130	96	21	198	255
Somerford, Great	38	48	—	101	92	185	6	2	193
Little	86	100	1	217	203	231	157	32	420
Stanton St. Quinton	114	114	2	318	384	6	17	679	702
Sutton Benger	1567	1911	46	4110	4537	2898	589	4307	8667
Westport									
township									

POPULATION.

235

Mere	Maiden Bradley	parish	91	106	—	240	270	—	—	—	510
Melkham	Bulkington	- tithing	59	67	1	137	169	80	23	223	326
	Earlsote	- parish	52	63	1	162	180	31	125	186	342
	Kilnerton	- ditto	130	140	5	363	385	20	668	60	748
	Kelkham	- town	759	781	26	1864	2166	370	1299	2361	4030
	Polahott	- parish	56	66	4	197	171	84	23	201	308
	Seend	- ditto	169	192	10	459	517	25	60	891	976
Pottern and Cannings	Whaddon	- ditto	10	10	—	12	24	12	—	24	36
			1285	1319	47	3154	3612	632	2198	3946	6766
	Bromham	- township	171	278	4	590	624	374	324	556	1154
	Bishop's Cannings	- tithing	212	221	5	531	587	430	35	593	1108
	Chittoe	- ditto	32	42	1	98	134	54	74	94	222
			415	541	10	1149	1335	808	433	1243	2464
Ramabury	Raydon	- parish	58	67	4	142	148	43	35	64	290
	Bishopstone	- ditto	94	120	1	283	247	219	81	290	530
	Ramabury	- ditto	379	464	17	912	1051	1398	500	165	1963
			531	651	22	1337	1446	1560	616	469	2783

R. 2

Hundred,

Hundred, &c.	Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Persons not com- prised in the two preceding Classes.	
Salisbury	Albourne	260	255	5	617	663	1128	152	—	1380
	Avebury	115	115	5	291	299	301	23	966	590
	Broadhinton	82	119	—	250	300	158	172	219	550
	Clatford	26	26	—	51	71	5	1	116	122
	Kennet, East	19	19	2	39	63	59	3	60	102
	Lockeridge	51	52	4	83	111	6	10	178	194
	Mildenhall	75	84	—	191	185	112	18	246	376
	Ogbourne St. Andrew	83	84	2	215	219	219	18	197	494
	Ogbourne St. George	85	93	3	195	211	239	28	139	406
	Overton, West	33	36	2	83	87	11	13	148	172
	Presthure	100	100	1	232	264	470	17	—	496
	Savernacle Park, North	12	16	1	92	95	49	—	18	67
	Winterbourne	37	43	—	79	98	42	3	132	177
	Monkton	978	1042	25	2360	2606	2679	453	1819	4966

POPULATION.

237

Swanborough	Alcannings	110	2	276	270	254	36	256	646
-	-	99	110	70	75	142	3	—	145
-	-	18	18	84	49	24	8	59	83
-	-	29	34	78	96	108	4	67	174
-	-	31	41	61	87	163	5	—	168
-	-	58	73	168	179	91	18	238	347
-	-	86	89	210	247	157	34	266	457
-	-	97	46	73	86	76	15	68	159
-	-	4	5	22	16	20	—	18	38
-	-	23	25	49	69	100	—	18	118
-	-	80	98	152	168	110	17	193	920
-	-	44	44	98	108	89	114	13	206
-	-	2	3	8	6	3	6	5	14
-	-	19	25	37	45	41	4	87	82
-	-	17	18	51	89	27	4	59	80
-	-	21	28	57	74	49	2	80	181
-	-	26	34	67	96	157	6	—	163
-	-	36	46	100	113	73	3	137	213
-	-	41	42	83	79	82	5	10	162
-	-	160	190	424	494	145	94	679	918
-	-	43	53	112	109	100	12	109	221
-	-	32	50	68	89	136	21	—	157
-	-	57	64	127	170	114	10	173	297
-	-	87	97	239	221	76	49	365	430
-	-	210	210	410	489	285	61	553	899
-	-	33	39	83	90	167	6	—	173
-	-	121	146	267	300	239	68	260	567
-	-	35	49	101	123	87	16	171	224
-	-	51	79	149	177	159	49	118	326
-	-	1592	1756	3664	4164	3219	662	2882	7828
-	-	48	48	—	—	—	—	—	—

Hundred,

Hundred, &c.	Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Per- sons not com- prised in the two preceding Classes.	
Underditch	Milford	69	72	3	200	219	34	260	125	419
	Stratford under the Castle	62	74	5	170	182	96	27	229	352
	Wilsford and Lake	23	23	1	48	51	57	4	38	99
	Woodford	74	81	4	171	174	290	29	26	345
		228	250	13	589	626	477	320	418	1215
Warminster	Bishopstrow	51	51	4	97	130	40	35	162	227
	Corsley	278	383	16	658	754	215	698	499	1412
	Dinton	64	96	3	200	221	29	25	327	421
	Fisherton Delemere	57	60	2	123	147	119	4	147	270
	Noton Bavant	48	51	2	139	125	—	—	—	264
	Pertwood	2	2	—	9	6	—	—	—	15
	Sutton Vacey	136	138	4	282	340	172	81	369	622
	Treffont Magna	38	49	4	97	102	40	13	146	199
	Upton Scudamore	64	100	3	188	221	108	37	1	409
	Warminster	961	1000	22	2253	2679	—	—	—	4932
		1699	1935	60	4046	4725	723	833	1691	8771

POPULATION.

289

Westbury	Bratton	- township	253	-	530	555	208	45	853	1085
	Dilton	- ditto	293	6	714	810	101	396	1	1524
	Westbury	- town	344	10	864	973	76	256	1505	1837
	Leigh	- tithing	294	2	709	766	128	259	4	1475
Whorwells-down			1184	18	2817	3104	513	956	2342	5921
	Ashton Steeple	- township	137	2	905	913	95	25	498	618
	West	- tithing	64	1	159	185	241	86	17	344
	Bradley, North	- township	145	3	427	495	180	723	19	922
	Coulstone, East	- parish	9	-	34	56	3	-	-	90
	Edington	- ditto	170	6	377	457	164	93	180	894
	Hinton	- tithing	42	3	84	90	46	16	112	174
	Little	- ditto	13	-	28	37	50	15	-	65
	Kevil	- parish	95	1	223	243	380	86	-	466
	Semington & Littleton	- tithing	48	-	101	99	180	16	4	200
	Southwick	- ditto	189	2	539	607	176	931	39	1146
			912	18	2277	2582	1515	1931	869	4859
Town of Marlborough	Mary, St.	-	245	14	534	588	6	171	145	1122
	St. Peter and St. Paul	-	196	9	644	601	25	426	794	1245
			441	23	1178	1189	31	597	959	2367

Hundred,

ndred, &c.	Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.					Total of Persons.
		Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Persons not comprised in the two preceding Classes.		
City of New Sarum	The Close	96	95	5	197	345	4	28	510	542	
	St. Edmund's	633	821	20	1444	1715	18	984	2157	3159	
	St. Martin's	364	487	11	728	1022	20	624	1106	1750	
	St. Thomas	396	430	9	1043	1174	—	687	1530	2217	
		1489	1833	45	3412	4256	42	2323	5303	7668	
Town of Devizes	John, St. the Baptist	286	297	9	679	891	50	239	1281	1570	
	Highway	15	19	—	50	54	43	3	58	104	
	James, St.	246	287	3	526	674	188	161	851	1200	
	Lavington, West	214	237	5	459	499	477	50	431	958	
	Marston	31	37	3	70	82	63	2	87	152	
	Virgin Mary	342	400	12	899	1078	71	705	1201	1977	
	Potterne	182	191	6	414	412	246	59	521	826	
	Rowde	178	196	3	372	424	590	168	38	796	
	Worton	58	64	—	155	171	85	18	223	396	
		1532	1728	41	3624	4285	1813	1405	4691	7809	

POPULATION.

241

The following Returns came too late for regular insertion, the greater part not having been received till January 1802, although they have been due since the 10th March, 1801, viz.

		1254	1551	34	3473	5829	424	4648	2250	7302
Chippenham	Town of Bradford	3	3	—	15	111	26	—	—	26
Damerham, South	Surrendral	103	107	7	247	282	149	37	343	529
	Damerham, South	246	259	2	579	649	525	625	78	1228
	Deverill Longbridge	35	40	—	79	89	128	37	3	168
	Monkton	1018	1073	67	2552	3247	20	4750	1020	5799
Dunworth	Town of Trowbridge	46	46	1	108	134	100	11	131	242
	Ansty	22	35	—	94	105	177	—	22	199
	Sedghill	38	49	1	99	118	44	15	158	217
	Swallowcliffe	357	379	7	940	1021	300	141	1520	1961
	Tisbury, with Chisgrove & Staple	26	31	1	75	65	4	12	134	140
Elstubb and Everley	Riffield	33	38	—	94	90	174	10	—	184
Mere	Knolly, West	181	201	2	400	481	94	764	23	881
	Mere Town	50	66	—	146	160	63	83	160	306
	Stourton	156	181	4	384	439	335	484	4	829
	Woodland and Chad-donwicke	85	90	2	188	198	83	293	11	387
Selkley	Zeals	17	18	—	51	48	99	—	—	99
	Beckhampton	24	39	—	102	116	218	—	—	218
	Winterbourne Bassett	30	35	3	63	67	130	—	—	130
Swanborough	Stert	3724	4241	131	9689	11,150	3093	11,910	5827	20,839

Observation.—On application to the Deputy Sheriff of the county of Wilts, for a return of the population of gaols of the said county, if it had not been included in any other return, he replied by letter, "That the population of the gaols had not been included, but that he did not know how to fill up the schedule transmitted to him."

Parish,

SUMMARY.

Parish, Township, or Extra-parochial Place.	Houses.		Persons.		Occupations.				Total of Persons.
	Inhabited.	By how many Families occupied.	Uninhabited.	Males.	Females.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Manu- factures, or Handicraft.	All other Persons not com- prised in the two preceding Classes.	
Hundred of Alderbury	759	788	31	1836	1905	1298	559	1835	3741
Amesbury	1042	1099	63	2426	2521	2760	1504	1596	4947
Bradford	236	241	10	575	655	430	477	260	1230
Branch and Dole	1411	1558	32	3416	3875	1567	1866	2511	7291
Calne	1092	1154	31	2409	2776	1730	266	4389	6125
Cawden and Cadsworth	710	777	20	1726	1866	1329	373	1859	3592
Chalk	499	553	11	1228	1294	1234	151	1119	2517
Chippenham	2262	2493	106	7513	8295	3387	3927	6815	15,308
Danerham, North and South	588	686	21	1454	1568	2062	266	467	3022
Downton	1006	1094	18	2449	2614	880	433	3630	5063
Dunworth	516	578	23	1328	1452	784	312	678	2780
Elstubb and Everley	972	996	53	2338	2555	1686	487	2718	4893
Frustfield	214	230	7	553	510	873	133	57	1063
Hertebury	821	935	30	2088	2438	1931	1273	644	4526
Higworth, Cricklade, & Staple	1723	1999	63	4539	5048	6245	650	2687	9587
Kingsbridge	1401	1530	35	3527	3825	2345	784	4264	7352
Kinwardstone	1725	1942	26	4329	4628	3183	779	5095	8957
Malmsbury	1567	1811	46	4110	4557	2698	589	5907	8667
Mere	91	100	—	240	270	—	—	—	510
Malsham	1235	1319	47	3154	3612	622	2198	3946	6768
Pottern and Canninge	415	541	10	1149	1335	808	433	1243	2484

Hundred

POPULATION.

1865

Hundred of	1851	1856	1861	1866	1871	1876	1881	1886	1891	1896	1901	1906	1911	1916	1921	1926	1931	1936	1941	1946	1951	1956	1961	1966	1971	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071	2076	2081	2086	2091	2096	2101	2106	2111	2116	2121	2126	2131	2136	2141	2146	2151	2156	2161	2166	2171	2176	2181	2186	2191	2196	2201	2206	2211	2216	2221	2226	2231	2236	2241	2246	2251	2256	2261	2266	2271	2276	2281	2286	2291	2296	2301	2306	2311	2316	2321	2326	2331	2336	2341	2346	2351	2356	2361	2366	2371	2376	2381	2386	2391	2396	2401	2406	2411	2416	2421	2426	2431	2436	2441	2446	2451	2456	2461	2466	2471	2476	2481	2486	2491	2496	2501	2506	2511	2516	2521	2526	2531	2536	2541	2546	2551	2556	2561	2566	2571	2576	2581	2586	2591	2596	2601	2606	2611	2616	2621	2626	2631	2636	2641	2646	2651	2656	2661	2666	2671	2676	2681	2686	2691	2696	2701	2706	2711	2716	2721	2726	2731	2736	2741	2746	2751	2756	2761	2766	2771	2776	2781	2786	2791	2796	2801	2806	2811	2816	2821	2826	2831	2836	2841	2846	2851	2856	2861	2866	2871	2876	2881	2886	2891	2896	2901	2906	2911	2916	2921	2926	2931	2936	2941	2946	2951	2956	2961	2966	2971	2976	2981	2986	2991	2996	3001	3006	3011	3016	3021	3026	3031	3036	3041	3046	3051	3056	3061	3066	3071	3076	3081	3086	3091	3096	3101	3106	3111	3116	3121	3126	3131	3136	3141	3146	3151	3156	3161	3166	3171	3176	3181	3186	3191	3196	3201	3206	3211	3216	3221	3226	3231	3236	3241	3246	3251	3256	3261	3266	3271	3276	3281	3286	3291	3296	3301	3306	3311	3316	3321	3326	3331	3336	3341	3346	3351	3356	3361	3366	3371	3376	3381	3386	3391	3396	3401	3406	3411	3416	3421	3426	3431	3436	3441	3446	3451	3456	3461	3466	3471	3476	3481	3486	3491	3496	3501	3506	3511	3516	3521	3526	3531	3536	3541	3546	3551	3556	3561	3566	3571	3576	3581	3586	3591	3596	3601	3606	3611	3616	3621	3626	3631	3636	3641	3646	3651	3656	3661	3666	3671	3676	3681	3686	3691	3696	3701	3706	3711	3716	3721	3726	3731	3736	3741	3746	3751	3756	3761	3766	3771	3776	3781	3786	3791	3796	3801	3806	3811	3816	3821	3826	3831	3836	3841	3846	3851	3856	3861	3866	3871	3876	3881	3886	3891	3896	3901	3906	3911	3916	3921	3926	3931	3936	3941	3946	3951	3956	3961	3966	3971	3976	3981	3986	3991	3996	4001	4006	4011	4016	4021	4026	4031	4036	4041	4046	4051	4056	4061	4066	4071	4076	4081	4086	4091	4096	4101	4106	4111	4116	4121	4126	4131	4136	4141	4146	4151	4156	4161	4166	4171	4176	4181	4186	4191	4196	4201	4206	4211	4216	4221	4226	4231	4236	4241	4246	4251	4256	4261	4266	4271	4276	4281	4286	4291	4296	4301	4306	4311	4316	4321	4326	4331	4336	4341	4346	4351	4356	4361	4366	4371	4376	4381	4386	4391	4396	4401	4406	4411	4416	4421	4426	4431	4436	4441	4446	4451	4456	4461	4466	4471	4476	4481	4486	4491	4496	4501	4506	4511	4516	4521	4526	4531	4536	4541	4546	4551	4556	4561	4566	4571	4576	4581	4586	4591	4596	4601	4606	4611	4616	4621	4626	4631	4636	4641	4646	4651	4656	4661	4666	4671	4676	4681	4686	4691	4696	4701	4706	4711	4716	4721	4726	4731	4736	4741	4746	4751	4756	4761	4766	4771	4776	4781	4786	4791	4796	4801	4806	4811	4816	4821	4826	4831	4836	4841	4846	4851	4856	4861	4866	4871	4876	4881	4886	4891	4896	4901	4906	4911	4916	4921	4926	4931	4936	4941	4946	4951	4956	4961	4966	4971	4976	4981	4986	4991	4996	5001	5006	5011	5016	5021	5026	5031	5036	5041	5046	5051	5056	5061	5066	5071	5076	5081	5086	5091	5096	5101	5106	5111	5116	5121	5126	5131	5136	5141	5146	5151	5156	5161	5166	5171	5176	5181	5186	5191	5196	5201	5206	5211	5216	5221	5226	5231	5236	5241	5246	5251	5256	5261	5266	5271	5276	5281	5286	5291	5296	5301	5306	5311	5316	5321	5326	5331	5336	5341	5346	5351	5356	5361	5366	5371	5376	5381	5386	5391	5396	5401	5406	5411	5416	5421	5426	5431	5436	5441	5446	5451	5456	5461	5466	5471	5476	5481	5486	5491	5496	5501	5506	5511	5516	5521	5526	5531	5536	5541	5546	5551	5556	5561	5566	5571	5576	5581	5586	5591	5596	5601	5606	5611	5616	5621	5626	5631	5636	5641	5646	5651	5656	5661	5666	5671	5676	5681	5686	5691	5696	5701	5706	5711	5716	5721	5726	5731	5736	5741	5746	5751	5756	5761	5766	5771	5776	5781	5786	5791	5796	5801	5806	5811	5816	5821	5826	5831	5836	5841	5846	5851	5856	5861	5866	5871	5876	5881	5886	5891	5896	5901	5906	5911	5916	5921	5926	5931	5936	5941	5946	5951	5956	5961	5966	5971	5976	5981	5986	5991	5996	6001	6006	6011	6016	6021	6026	6031	6036	6041	6046	6051	6056	6061	6066	6071	6076	6081	6086	6091	6096	6101	6106	6111	6116	6121	6126	6131	6136	6141	6146	6151	6156	6161	6166	6171	6176	6181	6186	6191	6196	6201	6206	6211	6216	6221	6226	6231	6236	6241	6246	6251	6256	6261	6266	6271	6276	6281	6286	6291	6296	6301	6306	6311	6316	6321	6326	6331	6336	6341	6346	6351	6356	6361	6366	6371	6376	6381	6386	6391	6396	6401	6406	6411	6416	6421	6426	6431	6436	6441	6446	6451	6456	6461	6466	6471	6476	6481	6486	6491	6496	6501	6506	6511	6516	6521	6526	6531	6536	6541	6546	6551	6556	6561	6566	6571	6576	6581	6586	6591	6596	6601	6606	6611	6616	6621	6626	6631	6636	6641	6646	6651	6656	6661	6666	6671	6676	6681	6686	6691	6696	6701	6706	6711	6716	6721	6726	6731	6736	6741	6746	6751	6756	6761	6766	6771	6776	6781	6786	6791	6796	6801	6806	6811	6816	6821	6826	6831	6836	6841	68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SECT. VI.—MARKETS.

WILTSHIRE is peculiarly fortunate in corn markets; Warminster, Devizes, and Salisbury, have each a large proportion of dealers from the adjacent counties. Of these, *and indeed of all corn markets*, Warminster ranks the highest. The universal custom of selling at a *pitched* market in the morning, and of receiving all the money the same day (generally before three o'clock), brings farmers frequently hither from a great distance. It is calculated that the quantity of corn and grain sold at Warminster market, amounts to 2000 quarters per week.

Bath and Bristol receive large supplies, especially of malting barley, from Warminster and Devizes.

Salisbury, as a cattle market, is one of the best and greatest out of London. Southampton and Portsmouth, and almost the whole of Hampshire, are supplied from this town; which is so situated, as to take not only the beasts intended for its own market, but large droves of cattle destined for London; which, in a *quick* time, are frequently sold at Salisbury. The market days are, at Warminster on Saturdays, Devizes on Thursdays, Salisbury on Tuesdays, and a cattle market *on every other* Tuesday, called the fortnight's market.

There are other towns in this county which have pretty good markets, viz. Swindon for cattle, Marlborough for corn and cheese, &c. &c. .

As to the dairy productions, these are most commonly sent off to the factors in London, Bath, and Bristol.

Butter of a superior quality, and excellent cream cheeses, are sent into Salisbury from the adjacent water-meadows of Britford, &c.

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SECT. VII.—WEIGHTS AND MEASURES.

Weights.—Butter usually sold by the pound, which was formerly 18 oz., now generally weighs 16 oz.

Cheese is usually sold by the cwt. (112 lb.)

Fat cattle, particularly pigs, are usually sold by the score of 20lb.

Measures.—A bushel of corn was till lately nine gallons and nearly a quart, but is now generally reduced to the statute measure of eight gallons.

Wheat, beans, pease, and vetches, are usually sold by the sack of four bushels.

Barley and oats usually sold by the quarter of eight bushels.

CHAP. XVII.

AGRICULTURAL SOCIETIES.

THERE is no society instituted in this county for the improvement of agriculture; but the great number of Wiltshire members that help to compose that truly respectable body called the "Bath and West of England Society," is a convincing proof there is a turn for improvement in the county, and that although there may be a few errors in the practice of Wiltshire farmers, they do not arise from a too stubborn attachment to old opinions and customs, but in some instances even from attempts to get rid of those hindrances to improvements by adopting new modes, which, though at first sight they appeared very plausible, experience has shewn inadequate to the end proposed. But as a general spirit is now excited throughout the country to attempt improvements, there is no doubt that it will in time fix upon proper objects.

The great design of the Board of Agriculture, is to point out those objects throughout the kingdom; and the farmers of Wiltshire, it is believed, will not be the last to avail themselves of the benefits that may be expected to arise from the publication of the valuable papers on Agriculture, which are daily forwarded to that Honourable Institution.

CONCLU-

CONCLUSION.

SECT. I.—BENEFICIAL PRACTICES.

Dairy System.—The system of making cheese, as practised in North Wiltshire, would certainly be of the greatest service in many parts of the kingdom, if it could be introduced into them; and the production of good cheese in this district from land totally dissimilar, as stated in the preceding observations, shews that the goodness of this article does not depend so much on soils or situations as is generally imagined; indeed it is well known, that the fame of this district for good cheese, is not very ancient. The circumstance of its being sold for Gloucester cheese, till within these few years, shews that Gloucestershire had the name first, though the quantity now made in that county is far less than what is made in this district, according to the report of Mr. Marshall, who spent much time in both districts, for the purpose of examining into this particular branch of rural economy.

Many of the best dairy farms in the district appear, as has been already stated, to have been in an unclosed state of arable, at no very remote period of antiquity, and many of the farm houses and buildings appear to be of modern erection.

The convenient situation of the houses and buildings of a great part of the dairy farms of this district, shews that many exchanges in property must have taken place before this desirable circumstance could be ob-

tained; an object well worth imitation in all countries where it can possibly be adopted; and perhaps there is no single local circumstance that contributes so much to the excellence of the dairy system of this district, as the general convenient situation of the lands round the houses as a common centre, so that the dairy-men are able to drive all their cows home to milking, and thereby to put all their milk together of an equal temperature; and by beginning their work much earlier in the morning, they can make cheese twice a day during the whole season. This is impossible to be done, where servants must be sent to milk cows in detached and distant enclosures, as is too frequently the case in many dairy countries, and particularly in the county of Somerset.

Good butter is made in every part of the kingdom, because the process is simple and well known; and if the same methods were practised in making cheese in other countries, as are used in this, there is no reason why cheese of the same goodness might not be made there.

As Mr. Marshall has so fully detailed the methods used by the North Wiltshire dairy-women, it is unnecessary to repeat them here.

But it may be proper to add one general remark on making cheese, viz. that there are few countries which are famous for bad cheese, where the reason may not be traced much oftener to a fundamental fault in the process of making, and particularly in that essential article the rennet, than to any particular local fault of the soil or situation, or even to want of care and attention in the dairy-woman.

Draining.—Another practice in this district, is the
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attention that has been paid of late years to the draining of land.

The great object of manure is to warm and excite a fermentation, but the land must first be in a state to receive it, or it is useless to put it on. Manure may as well be thrown into water, as be put upon land soaked and poisoned with water.

This improvement, which may be called the basis of all other improvements in a wet cold country, can never be too much recommended, and is worthy of imitation in many other countries, where, though equally necessary as in this district, no attention is paid to it.

SECT. II.—IMPROVEMENTS FOR CONSIDERATION.

Breed of Cows.—The management of the dairy part of this district has been a source of so much profit as well as credit to the county, that it certainly must in its principle be right; and while there is so much to admire, it would be invidious to cavil at trifles: whether the dairy-men are wrong or right in their choice of the kind of cows, will probably be hereafter determined. If they could buy another kind of cows immediately fit for the pail, as easily as they can the long-horned ones, it is probable that kind might not be so universal; but it is clear that they think they get nothing by breeding their own stock, and perhaps they may think right.

The cows they buy are bred in a country whose cheese does not stand so high in repute as that of North Wilts, and of course may be bred cheaper than they could

could breed them at home; but if this argument is well founded, are the North Wiltshire dairymen right in fattening calves? Does not the fattening of calves consume as much milk as the weaning of calves, and would not the additional cheese they could make, if their cows dropt in March or April, instead of January or February, pay as much or more than fat calves; without reckoning the injury done to the constitution of the cows by calving repeatedly in the winter? Undoubtedly nothing has contributed so much to keep up the high price of cheese and butter, as the amazing increase of late years in the quantity of winter veal sold, not only in the London market, but in almost all the towns in the kingdom.

North Wiltshire must send its veal to London market on the same terms as other counties within the same distance can do, while that veal is made at the loss of cheese which would yield 20 or 30 per cent. more than the average price of cheese made in those counties. This is the reason given, why North Wiltshire dairymen wean so few calves, and why they make so little butter for sale: the same reason seems to apply against their fattening calves.

But this is meant as a hint for consideration, rather than an object of censure.

Arable Management.—As to the management of arable land, North Wiltshire certainly does not shine.

It is a happy thing for the landholders of the district, that the predilection of the occupiers is so strong for pasture land. Land so cold, and so wet in its nature, as a great part of the vale land of this district, can never be permanently improved while under the plough. The bare mention of a known fact, that the comparative

tive value of land of equal native goodness, in a pasture or an arable state, is usually as three to two, is a sufficient proof of this. The lands that are cold and wet should be laid down to grass and drained, and this would increase the quantity of manure for the warm and dry lands, which would be very profitably kept in tillage.

This particularly applies to all the deep cold soils between Chippenham and Wootton Bassett.

As to the stonebrash land in the north-west part of the district, it has been already observed, that the general system of husbandry, and particularly the almost entire dependence on the sheep-fold for manure, is not strictly correct in many parts of this district. All the light and dry parts which require treading to make them closer, are undoubtedly proper for sheep-folding, but many of the wet cold parts are not at all calculated for that system. Those of the latter description are by no means fit or safe for sheep without draining, and as that is seldom practicable to any extent in an arable state, many of them should be laid down to pasture. Those parts which are already laid down, are remarkably sweet-feeding ground; and in that state of husbandry the country would still be calculated for feeding sheep, but not on a folding system. The long-woolled sheep, either the Cotswold or the Leicestershire, are particularly proper for land where a part might be always in pasture, and the arable kept in that kind of husbandry that would produce green winter crops.

In those parts of the country where the land is light and dry, the sheep-fold system might still be used. The large farmers would be much better able to support a flock, than they now are, by laying down the wet parts of their land to pasture, and sowing sainfoin

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on the dry and poor parts; and the small farmers whose arable land required folding, would find it much more profitable to take in sheep from the down farms to eat their green winter food, than to keep small flocks of their own.

It has been already remarked, that notwithstanding the dairy system is so well understood, and is so very profitable in this district, there is nevertheless a propensity in many parts of it to grazing cattle. It is undoubtedly for the interest of the community that cattle should be grazed somewhere, but it also is their interest, and still more so the interest of every individual, to apply his land to the purposes which nature designed it. Nature never designed many parts of this district, and particularly the cold wet parts where oak timber is the natural weed of the country, for grazing. On those soils the summer is too short for that purpose, and they never can be applied to so great advantage as the keeping of dairy cows,



SECT. III.—OBSTACLES TO IMPROVEMENTS.

THERE are *two* obstacles to improvements in agriculture, which require to be particularly noticed here, viz.

First, The frequency of small water-mills, as particularly injurious to water meadows: and,

Secondly, The difficulties thrown in the way of small enclosures of commonable lands, by the expense of an Act of Parliament; the first applying more particularly to the peculiar husbandry of Wiltshire, and the second being equally an obstacle to improvements in every part

part of the kingdom, where there are lands still unclosed.

Water-mills, which are very numerous in Wiltshire, and particularly in the South-east Districts, are in many instances exceedingly injurious to water-meadows.

It was formerly thought necessary that every manor whose situation permitted it, should have its own mill, for the conveniency of the tenants to grind their corn, and many of these mills remain at this day, although few people now grind their own corn, and although by the improved mechanism of mills, one can now do the work that three or four did formerly.

Between Warminster and Salisbury, a distance of about twenty miles, there are nearly twenty water-mills, although one third of the number (if well constructed) would be more than sufficient to do all the work of the country. Many of these mills are very injurious to the water-meadows below them, and frequently prevent the making new ones; and the same inconveniences exist on the rivers in general throughout the county, and particularly in the South-east District.

To remedy this, in all Acts of Parliament for enclosures, where there is a possibility of making water-meadows, or of improving those already made, power should be given to the Commissioners to take from the mills at stated times, all or such part of the water as should be absolutely necessary for the water-meadows below; and where such mills are really unnecessary, to direct them to be taken away, such Commissioners being at the same time empowered to fix an annual rent-charge to be paid to the owners of such mills so injured, by the owners of the land so benefited, as is done in the cases of canals, subject to the like appeal as is allowed in canal acts.

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In parts of the country which are already enclosed, disputes frequently happen between owners of mills and owners of water-meadows, which are almost impossible to be explained or understood in a court of justice.

A mode might perhaps be practicable, of empowering Justices of the Peace at their quarter-sessions, to order a reference to men of judgment in the neighbourhood, and to make their award matter of record to bind the parties.

The other obstacle to improvements in agriculture, is the impediment thrown in the way of enclosures of commonable lands, particularly where the quantity of land is small, or the number of proprietors large, by the difficulty and expense of procuring Acts of Parliament for that purpose.

It has been already remarked, that there are a great number of common-fields still remaining in Wiltshire, particularly in the South-east part of the county; and that in the North-west part there are still many open common pastures. These are undoubtedly obstacles to all improvements in agriculture, and ought to be divided without delay.

There have been many common-fields lately enclosed in the South-east part of the county, but in the North-west part enclosures have gone on very slowly for some years past. One reason has already been given for this, viz. the badness of the roads, and the difficulty and expense of making such new ones as would be necessary in case of an enclosure. This impediment is now nearly removed in North Wiltshire, and good roads will enable the owners of the adjoining commonable land to make the most of it. And there is not a doubt that the greatest part of the commonable lands in the county would

would soon be divided, provided the legal difficulties which stand in the way of enclosures could be removed.

It is well known, that no commonable land, be it ever so small, can be enclosed or divided without Act of Parliament, unless by the consent of all parties. That consent is always difficult to be obtained, and sometimes (particularly where some of the proprietors are minors, or under any legal disability) impossible. An Act of Parliament is then the only resort, but it frequently happens that the quantity of open land belonging to one manor is insufficient to afford an expense of 300*l.* for an act, besides the subsequent expense of working a commission. And although the land-owners of two or more manors might join in one act, yet it is a difficult matter to get them to agree on the terms of it, especially when, as is often the case, their interests, or at least their claims on the commonable lands, clash and interfere with each other.

The expenses of an Act of Parliament for an enclosure are not entirely occasioned by the fees of the two Houses, but by the delay and uncertainty of attendances in London, owing to the multifarious and increasing business of Parliament, and which an annihilation, or even a reduction of those fees, would tend much more to increase than prevent.

Remedy proposed.—There seems to be a mode by which this difficulty might be in a great measure obviated, and small common-fields or commons divided at a trifling expense, viz. by empowering the Justices of the Peace to receive applications for that purpose at the quarter-sessions, and particularly in those cases where a great majority of the proprietors were consenting, or where the objections were chiefly founded on legal disability.

Notice

Notice of the proposed application to the Justices might be given (in the way now prescribed by Parliament) in August or September; the bill of the proposed regulations of the enclosure might be delivered at the Michaelmas sessions, and made public immediately after: objections might be heard at the Epiphany sessions, and the bench might then determine for or against an enclosure.

Those who doubt the competency of a Court of Quarter Sessions to do this business properly, will consider that the local information so essential to the proper framing an enclosure bill, may be obtained, and the objections of parties aggrieved may be investigated, not only much cheaper, but much better, on the spot, than can possibly be done before Parliament; and those who think it would be giving too much power to Justices of the Peace, will consider that they have already a greater power than this, viz. the hearing and determining appeals that may come from parties aggrieved under enclosure Acts passed by Parliament. And indeed if it were thought necessary, all possibility of partiality might be prevented, by prescribed rules and regulations as to the proportional majority of consenting proprietors absolutely necessary to the passing an order for an enclosure.

It may perhaps be expected by some, that in speaking of obstacles to improvements in agriculture, the payment of tithes in kind should be mentioned, and some plan proposed for its abolition*; but it is not to be expected that so great an alteration in the policy of the kingdom, involving so many valuable interests, and

* The author's opinion on a commutation for tithes has already been published, in the Papers of the Bath and West of England Agricultural Society.

important consequences, can be effected from the crude and undigested schemes of an humble individual. The Board of Agriculture may perhaps hereafter be able, from the combined information that will be collected by them, to determine whether any thing can be done in this important business, and what measures are the most likely to give general satisfaction to the parties interested.

However the payment of tithes in kind may be an obstacle to the agriculture of the kingdom in general, it is but common justice to the Clergy of the county of Wilts to remark, that so far as respects them, that obstacle can hardly be said to exist. In many of the late enclosures, commutations either in land or money have been accepted, and the parishes discharged of tithes ; and where tithes are still due, it is a fact, that there is scarcely one clergyman in twenty throughout the county, who takes them up in kind, although the laymen who are in possession of tithes, too often set them the example of refusing to compound them at any price whatever.

APPENDIX.

A GLOSSARY

OF

THE NAMES OF IMPLEMENTS OF HUSBANDRY, OPERATIONS IN AGRICULTURE, AND OTHER PROVINCIAL WORDS, IN COMMON USE IN THE VILLAGES OF WILTSHIRE.

SOILS.

Sands—Of three sorts in the county; red, black, and green.

White Lands.—The chalky loams, or rather dissolved chalks, on the sides of the chalk-hills.

Clays.—The general name for the stiff lands of the county. Some of the strong sandy lands in Pewsey Vale, which are a mixture of chalk, peat, and sand, are called *clays*, and frequently the white lands are so called.

STONES.

Grey Weathers—And when broken, called *sarsons*. The amazing large single stones which lie about on the Marlbro' Downs, and particularly at Abury. Stonehenge stones are supposed to have been carried from hence.

Chalk and Malm.—If the chalk is dry enough to write with, it is called chalk: about Tidworth, if damp and moist, it is called malm; the latter is the most valuable for manure and for lime.

Fire

Fire Stone.—A hard-brown kind of malm, frequently used for the inside of lime-kilns.

Corn Grate Stone.—The hard flat stone of which the great part of the under soil of the north-west part of the county consists.

SITUATIONS.

Downs.—The chalk-hills, particularly when in a permanent state of pasturage.

Bournes.—The vallies between the chalk-hills or the rivers in those vallies; but usually applied to the valley and river jointly.

Combes.—The wooded side of hills.

Ham, and particularly Mill Ham.—A narrow strip of ground by the side of a river.

Gore.—A triangular piece of ground.

Linch, Linchet, or Landshard. The mere green sward dividing two pieces of arable in a common-field, called in Hants, a lay bank.

Whip Land.—Land not divided by meres, but measured out (when ploughed) by the whip's length.

Catch Land.—Pieces of arable land in common-fields of equal sizes, the property not being ascertained, but he that ploughed first chose first.

Lot Meads.—Common meadows divided into acres or equal-sized pieces; but the property to the hay of each piece being determined yearly by lot.

Hayes.—As a termination of a word, such as calf-hayes, cow-hayes, &c.; a piece of ground enclosed with a live hedge; from the French word *haie*, a hedge.

Tining.—A new enclosure made with a dead hedge; from the old word *tine*, a stake.

PROPERTY AND TENURES.

Copyhold or Leasehold Property for Lives.—Life-holds, livings.

Freehold Property—Is usually called by way of distinction from lifehold land.

Yard Lands.—That is, land sufficient for a plough of oxen, and a yard to winter them. Ancient copyhold tenements into which manors were usually divided, each being occupied by *one* tenant, and enjoying equal stinted rights of common.

Tenantry Fields and Downs.—Fields and downs in a state of commonage on the ancient feudal system of copyhold tenancy.

Severalty.—A state of tenancy where the arable lands have been divided.

PROVINCIAL TERMS FOR SEXES AND AGES OF CATTLE.

Sheep.—Ram, ewe, lambs, till about Christmas.—Wether hogs, chilver hogs, from thence till shear-time.—Two-teeth wethers or ewes, from the shear-time after one year old; four teeth from the shear-time after two years old; six teeth from the shear-time after three years old; full-mouthed from the shear-time after four years old.

Neat Cattle.—Bull, cow, calf.—One yearling heifer or bull, first year.—Two yearling heifer or bull, second year.

Colours.—Sparkd, of two colours, mottled; brind-ed, light brown, approaching to dunn; lined, with white back.

Pigs.—Boar and sow.—Shoots, young pigs of three or four months old; maiden pig, a young sow that has not bred; boar stag, a castrated boar.

The

The word pig is used for fat pigs of all sizes ; the word hog not being so common.

The word hog, from hough or hook, to cut ; as a hog'd mane or hog'd thorn hedge, originally meant a cut or castrated animal, and in that sense was applied equally to all kinds, as a hog colt, a hog sheep, a hog pig ; but at this time it is used in a more extended sense, for any animal of a year old, as a hog bull, a chilver hog sheep.

DISORDERS IN CATTLE.

Coath or Bane.—The rot in sheep, of which the first symptoms are flukes, provincially, “plaiice,” in the liver.

GRASS-LAND MANAGEMENT.

Trenching or Guttering Land.—Draining it with open drains.

Gripping or taking up Gripes.—Draining with covered drains, chiefly with turf or stone.

Frying, Freaing, or Frithing.—Making covered drains filled up with brushwood.

Hain up Land.—To lay it up for mowing.

Agistment.—Cattle at agistment, are those taken to keep by the week or month.

WATER-MEADOWS.

Flowing or Floating Meadows.—Those that are laid up in ridges with water-carriages on each ridge, and drains between.

Catch Meadows.—Those on a declivity where the water falls from one level trench to another.

Drowning Meadow.—Laying them under water.

IMPLEMENTS OF HUSBANDRY.

Shoul.—Usually means a shovel, but frequently a spade.

Scoop.—A shovel.

Prong or Pick.—A fork for the stable, or for hay-making.

Reap-hook.—This is a short-handled hook without teeth; the blade bent beyond the square of the handle; and used to cut to the hand a handful at a time.

Scythe or Sive.—The handle called the snead, usually about four feet long in the blade, and the stroke about six feet.

Seed-tip.—The box in which the sower carries his seed.

Plough.—A waggon and horses, or cart and horses together, are called a plough in South Wilts.

Dung-Pot.—A dung-cart.

Sole, Sull, or Sillow.—A plough.

To understand these terms, recourse must be had to those counties where the old modes and terms of husbandry still remain, viz. Devon and Cornwall, where the ploughing is done by oxen, and the carriage by horses under the pack-saddle. When a cart or wain was wanted, and which was seldom the case except for timber, the plough beasts were used, and it was said the plough did such and such work: when dung was to be carried, it was put in two pots or tubs across the horses' backs, whence dung-carts are still called pots.

The word *sole*, now *sull*, or *sillow*, meant a particular kind of plough, viz. a sole plough, the old ploughs being made without a sole to the share, having only a socket to fasten on the fore-shoot or chip; and when
these

these ploughs became general, they were called soles, and so distinguished from the old kind of ploughs, which are now scarcely known in the country.

Parts of a Waggon, called by provincial names.—Raves or sides, spances, compose the waggon-bed.—Peel, the pillow over the axle.—Main pin or thorough pin, the pin which fastens the bed to the carriage.

Parts of a Plough, called by provincial names.—The coulter, the cutting part which divides the land.—Fore-shoot, backward-shoot, two pieces of wood immediately behind the coulter.—Ground-rest, wood on which the share rests.—Grate-board, or bread-board, the mould or earth-board which turns the furrow earth, being frequently called grate.—Drail, the iron bow from which the traces draw, and which has teeth to set the furrow wider or narrower.—Whippence, viz. the weigh-beam and bodkins, the fore carriage of a plough, as also of the harrow and drag.—Wing and point of a share, when the smith dresses these, it is called, “laining.”

Parts of Harrows, or Drags, called by provincial names.—Harrows, the longitudinal bars.—Shares, the cross bars.—Riders, the loose pieces laid on to hold a pair of harrows together.—Tines, the teeth of the harrows or drags. They are so called because formerly made of wood, from the old word *tine*, a stake.—Harrows and drags are frequently called *ais*, or *as*, in South-Wilts, from being originally made in the shape of the letter A.

SHEEP-FOLDING.

Hurdles for sheep-folding—Six feet long, three and a half feet high, made of hazel rods closely wreathed, the upright rods called *sails*, and the long rods wreaths.

Fossels, or Foldshores.—The stakes to which the

hurdles are fastened with a loose twig-wreath at the top.

Poyning, or Penning.—Shutting up the sheep in the fold.

Sleighting, or Slaying.—Depasturing the sheep in the Downs, whence a sheep down is frequently called a sheep sleight.

Lambs' Cages.—Cribs for foddering sheep in fold; they are usually made semi-cylindrical, with cleft ash rods about six to seven feet long, and about one foot diameter.

Wiltshire shepherds seldom use crooks, as the sheep are so much easier caught when in fold; but they always use dogs to keep the sheep out of bounds, and by these means are enabled to feed close to an unclosed piece of standing corn without injuring it.

PROVINCIAL NAMES OF GRASSES.

Cinque-foil, or French grass, sainfoin.—Marl-grass, perennial red clover.—Dutch clover, perennial white clover.—Hop and ray, hop clover and ray-grass, sown together, a very common and very good custom.—Hop clover, yellow-flowering trefoil, or nonsuch.—Clover-heads, broad clover left for seed.—Milled hop, hop clover-seed cleaned from the husk.

VEGETATING PROCESS.

Wheat.—Not well healed, not well covered with earth when sown; gay, rank in the blade; winter proud, too rank; lodged, thrown down by wet or wind; knee-sick, weak in the stalk, and dropping on the first joint; britted, shed corn.

Barley.—Edge-grown, or in two shares twi-ripe,
barley

barley coming up irregularly from a want of rain after first sown, of course ripening unequally.

Oats.—Well harled, or well kidded, well eared.

Beans.—Well kidded, the stalks full of pods; bunched, when planted in bunches, and not in rows.

HARVEST PROCESS.

Hay-making.—Hain up the land, to shut it up for a crop of hay; hay in swath, when just mowed; tedded, when first thrown abroad; waked, when raked together in rows; pooked, cocked, first in foot-cocks, and when dry, in hay-cocks.

Wind Mows.—Cocks of a waggon-load or more, into which hay is sometimes put previous to ricking in catching weather.

Hay-ricks.—Are usually made round, and cut out at the bottom from three or four feet high, to make the rick stand like a nine-pin; sometimes oblong with coot-ed-ends, not gable-ends.

Cutting-knife.—The hay-knife, the blade a right-angled triangle, and the handle of wood, bent.

Ea Grass.—After grass.

HARVEST PROCESS CONTINUED.

Wheat.—Reaping, done with a short crooked hook in handfuls, or gripes; laid down in gripe, when laid down in handfuls untied; tithings, ten sheaves are set up together in a double row; aisles or isles, an indeterminate number of sheaves set up together in a double row.

Barley and Oats.—Barley and oats are always pooked or cocked, seldom carried from the swath.

N. B. Oats sometimes reaped and sheaved in North Wilts.

Wheat.

Wheat-reed.—Straw preserved unthrashed for thatching, as it is usually done in the south-west part of the county, the ears having been previously cut off to be thrashed.

Stubs.—The stubble of all corn is usually called stubs, as wheat-stubs, barley-stubs, &c. The right of feed in the stubs is sometimes called gratings.

BARN PROCESS.

Well hinted, well secured; a pair of threshles, or drashols, or flyals, a flail; van, heavier, casking or casing rudder, the winnowing fan and tackle.

Corn well arrayed, or rayed.—Corn well dressed and cleaned.

Backheaved.—Winnowed a second time.

Cave or Dust.—The chaff of the wheat and oats, which is generally given to the horse.

Barley Ailes.—The beards of the barley.

Parts of a Barn, Bay, or Field.—That part of a barn between beam and beam; e. g. a barn of four fields.

Spurling Boards, Fenders.—Side-boards, end-boards, to prevent the corn from flying out of the floor.

MARKET PROCESS.

Pitched Markets.—Where the corn is exposed for sale, as in Salisbury, Devizes, and Warminster, and not sold by sample.

Wheat is a good Berry.—When the grain is plump and well filled.

Corn has a good Hand.—When it is dry and slippery in the sack;

Or a bad Hand.—When damp and rough.

PROVIN-

PROVINCIAL NAMES OF COMMON NOXIOUS WEEDS.

White Couch.—"Triticum repens," called in other counties, stoyle squith, or quitch.

Black Couch.—"Agrostis stolonifera," or couchy bent.

Bossell.—Corn marygold; this plant is the plague of the sandy lands in the barley crop, and is frequently destroyed by chalking.

Tare Vetch.—Small flowered blue vetch.

Tare Vetch, with Wind.—The red and white striped convolvulus.

These two plants are the plagues of a weak wheat crop in the sand lands.

Red Weed.—The red poppy, which is the plague of the down lands in the wheat crop, if sown when the land is dry.

Wood Wax.—Common in poor pasture; flower yellow.

Charlock.—Called charlock in part of South Wilts.

Maudlin, or Mathern, or Wild Chamomile.—These weeds usually prevail when the ground is over-worked and made too light: common in cold wet arable lands in North Wilts.

Melilot—or king's claver.

Crowpeck.—Shepherd's purse, or shepherd's pedler.

Isnet.—Alkanet bugloss.

Cammock.—Rest-harrow.

WOOD AND FOREST TERMS.

Stowls, or Stools.—The stocks on which underwood grows.

Frith.—Thorns or bush underwood.

Drifts.

Drifts.—The rows in which underwood is laid when felled.

Ranges.—Two drifts.

Ton of rough Timber.—40 feet; the load 50 feet, is only used when timber is hewn for the Navy.

Drugging Timber.—Drawing out of the wood under a pair of wheels.

Hauling Timber.—Hauling is applied to the carriage not only of timber, but of all other commodities.

Cord of Plock Wood.—A pile of cleft wood, eight feet long, four feet high, and four feet wide.

Lugs.—Poles.

Draughts.—Hazel rods selected for hurdle making.

MEASURES OF LAND.

A Lug.—Called in other counties a rod, pole, perch, or land yard (all these names meaning the stick by which it was measured), is of three lengths in this county: 15, 18, and $16\frac{1}{2}$ feet. The first of these measures is getting out of use, but is still retained in some places, particularly in increasing masons' work. The second is the ancient forest measure, and is still used in many parts of the county for measuring wood-land. But the last, which is the statute perch, is by much the most general.

Yard of Land.—A quarter of an acre, so called because in ancient common-field lands, where the furlongs were forty poles long, the quarter of an acre was a land-yard, or pole at the end.

THE END.

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Rape, or coleseed.

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Turnip. Early stone.

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_____ Norfolk bell.

_____ Stubble.

_____ Green top.

Turnip. Red-top.

_____ Large yellow.

_____ Globe.

_____ White tankard.

_____ Green ditto.

_____ Red-top ditto.

_____ Large Dutch.

_____ True yellow Swedish,
_____ or ruta бага.

_____ White Swedish.

Vetch. Kidney.

_____ Chickling.

_____ Pale-flowered.

_____ Everlasting.

_____ Great wood.

_____ Six-flowered.

_____ Tufted.

_____ Bush.

_____ Hoary.

_____ Sainfoin.

_____ Red-flowered.

_____ Biennial.

_____ Bastard.

_____ Broad-podded.

_____ Rough.

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_____ Narbonne.

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_____ Streaked.

_____ White-flowered.

_____ White-seeded.

_____ Horse-shoe.

_____ Milk

_____ Liquorice.

Weld.

Wheat. Red Lammas.

_____ Common white.

_____ White hedge.

_____ White Siberian.

_____ Egyptian.

_____ Sicilian.

_____ Round African.

_____ Zealand.

_____ Cape.

_____ Dantzick.

Woad.

Yarrow.



